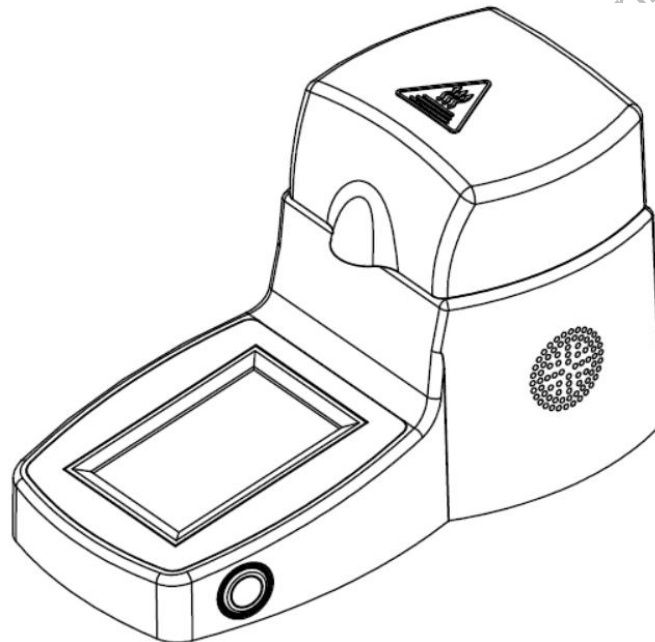

iDea06

Portable Smart Digestion Instrument User Manual



Copyright © 2024 Guangdong Rainstin Instruments Co., Ltd. All rights reserved

The specifications and information mentioned in this manual are for reference only and are subject to change without notice. Unless otherwise agreed, this manual is for guidance only, and all statements and information herein do not constitute any form of warranty.

Guangdong Rainstin Instruments Co., Ltd. <http://www.rainstin.com/>

Contents

Friendly Reminder	1
1.Product Introduction.....	2
2.Key Feature	3
3.Technical Specifications.....	4
4.Disclaimer and Warranty	5
3.1 Disclaimer.....	5
3.2 Warranty.....	5
5.Instrument Operation	6
5.1 Digestion Operation	6
5.2 Instrument Settings	9
6.Packing List.....	10

© Walter Technologies (HK) Limited — For Authorized Use Only

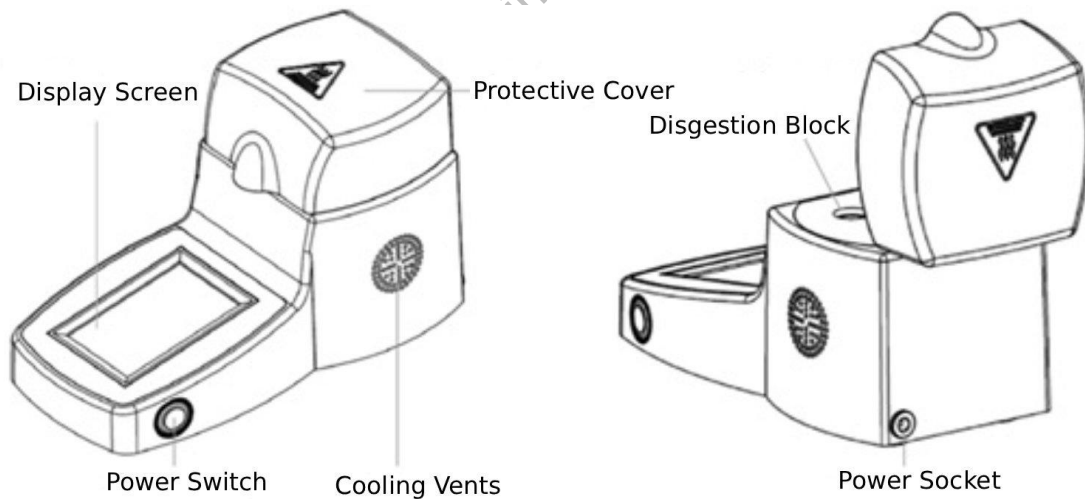
Friendly Reminder

1. Please read this manual carefully before using the instrument.
2. Do not touch the bottom of the device during heating.
3. Ensure the protective cover is in place before starting, and do not open it during digestion.
4. Do not use digestion tubes or caps that are damaged, leaking, or loose.
5. In case of liquid leakage, immediately turn off the power.
6. Do not place flammable or explosive materials near the instrument.
7. When not in use, keep the protective cover on to prevent dust ingress.
8. Always use a grounded power outlet to ensure safety.

© Walter Technologies (HK) Limited — For Authorized Use Only

1.Product Introduction

The **iDea06 Portable Smart Digestion Instrument** is a compact, multi-function 6-well digester designed for on-site and laboratory water quality testing. Equipped with an intelligent digestion system, it enables one-touch digestion for multiple water quality parameters, including COD, total phosphorus, total nitrogen, total chromium, and more. The instrument allows users to set digestion temperature and time according to specific testing requirements. With its portable design, it can be conveniently used outdoors with a mobile power source, making it ideal for both fieldwork and laboratory applications. It is widely applicable in wastewater treatment, environmental monitoring, emergency response, environmental law enforcement, petrochemical industries, research institutes, metallurgy, pharmaceuticals, food and dairy, textiles, electronics, aquaculture, photovoltaics, leather, paper-making, and other industries.



2.Key Feature

- **Compact and Portable Design:** Lightweight, with a 6-tube capacity, ideal for both on-site and laboratory water quality testing.
- **Intelligent Digestion System:** One-touch operation for efficient digestion of multiple water quality parameters.
- **Customizable Temperature and Time Settings:** Users can adjust digestion temperature and time to suit specific testing requirements for flexibility.
- **Rapid Heating Technology:** Quickly heats from 25°C to 165°C within 6 minutes, reducing overall digestion time.
- **Precise Temperature Control:** Intelligent PID control with 0.1°C resolution ensures consistent and accurate results.
- **Integrated Safety Features:** Automatic over-temperature protection and a high-transparency safety shield for safe operation.
- **User-Friendly Interface:** 3.5-inch TFT color touchscreen for easy navigation and real-time status monitoring.
- **Temperature Sensor Calibration:** Allows calibration of temperature sensors for accuracy and reliability.

3. Technical Specifications

Item	Parameter
Display & Input	3.5-inch TFT color touchscreen
Digestion Capacity	6 tubes
Sample Volume	0–10 mL per tube
Digestion Hole Size	16.6 mm diameter / 67 mm depth
Temperature Control Mode	Intelligent PID temperature control
Temperature Control Resolution	0.1°C
Temperature Accuracy	±1.5 °C
Temperature Range	0–200°C
Heating Speed	From 25°C to 165°C within 6 minutes
Custom Programs	Supported
Heating Mode	Thick-film heating technology
Overtemperature Protection	Automatic heating cut-off
Protective Cover	High-transparency integrated safety shield
Temperature Sensor Calibration	Supported
Completion Prompt	Pop-up notification + buzzer alert
Rated Voltage	24V / 10A
Rated Power	192 W
Dimensions (L × W × H)	224 × 112 × 142 mm
Weight	1.4 kg

© Walter Technologies (HK) Limited — For Authorized Use Only

4.Disclaimer and Warranty

3.1 Disclaimer

1. The specifications and information mentioned in this manual are for reference only and are subject to change without notice.
2. Please read the safety instructions carefully before using the instrument. The company is not responsible for accidents caused by improper operation.
3. This product is intended for use in professional fields. Operators must have relevant knowledge and skills. Accidents caused by misuse are not covered.

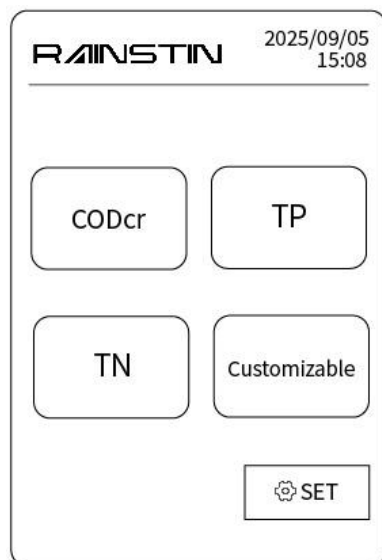
3.2 Warranty

1. All products undergo strict inspection before shipment and are covered by a one-year free warranty for quality issues.
2. During the warranty period, if problems arise due to improper operation, unsuitable environment, human error, accidents, or improper storage/transportation, the company may charge repair costs.
3. For out-of-warranty instruments, paid repair and service are available.
4. Warranty does not apply under the following conditions:
 - a. Unauthorized disassembly, modification, or repair.
 - b. Repairs by non-authorized personnel.
 - c. Tampering or breaking of anti-disassembly seals.
 - d. Use of non-original consumables causing malfunctions.
 - e. Products purchased through unauthorized channels.
 - f. Improper use or operation in unsuitable environments.

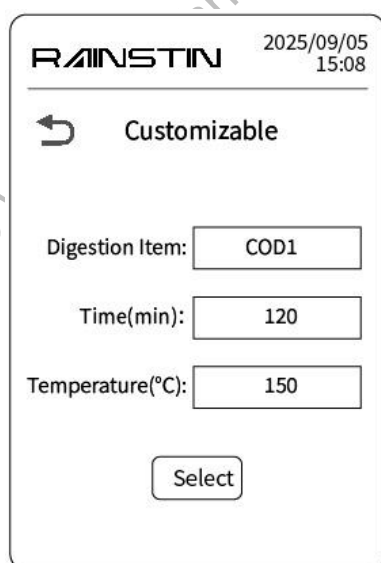
5. Instrument Operation

5.1 Digestion Operation

1. Connect the AC adapter (24V/10A) or portable 24V power source to the power socket, then switch on the power. The screen display is shown in the figure below.

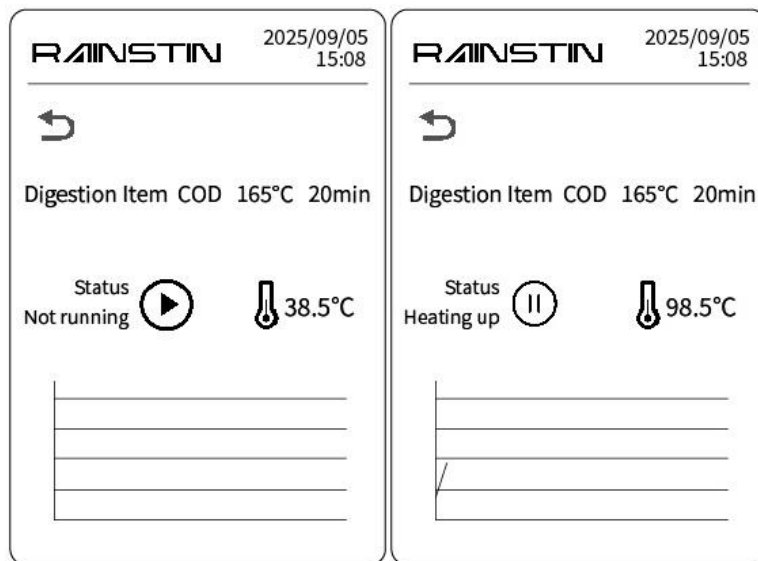


2. Select a preset digestion program or define a custom program if required (Press the "Customizable" button to access the custom digestion interface. Enter the required parameters in the input fields and click "Select" to confirm your custom digestion program). The screen display is shown in the figure below.



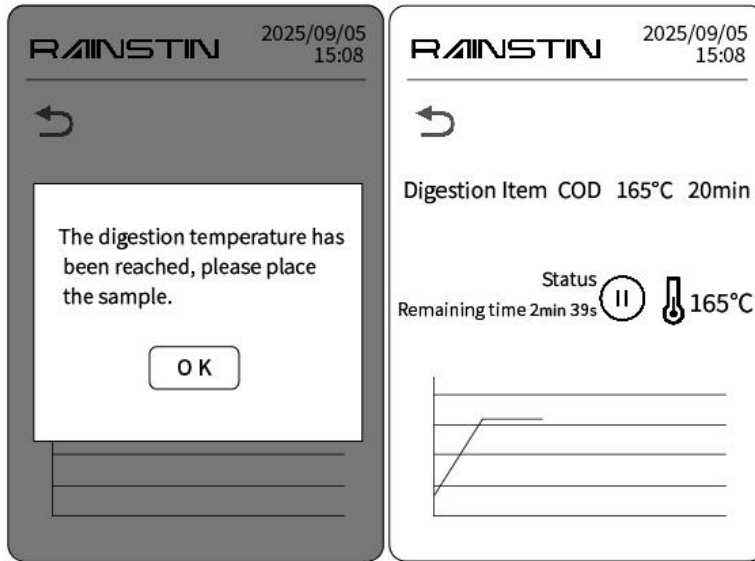
3. Taking COD as an example (other digestion programs follow the same procedure).

Click "CODcr" to enter the following interface shown below.

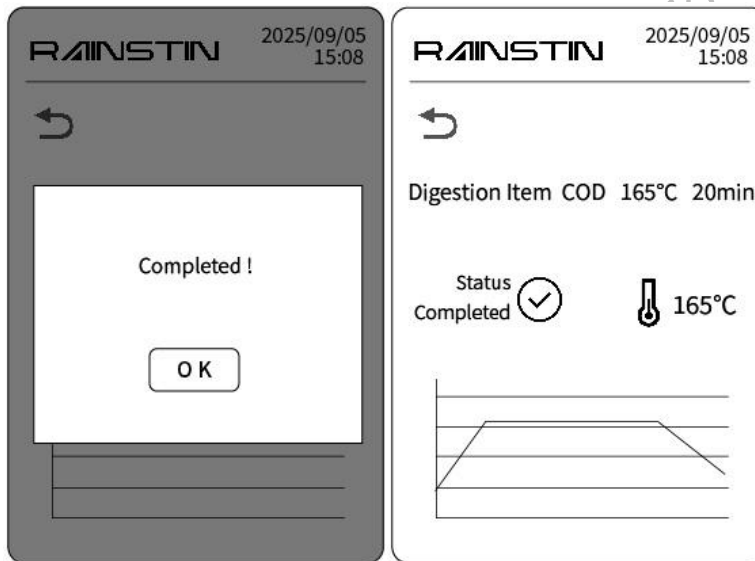


Click the "▶" button in the upper-left figure to start the heating program. At this time, the instrument enters the heating mode, the thermometer icon turns red, and the current temperature is displayed next to the icon in real time. Press "⏸" to stop heating, as shown in the upper-right figure.

When the selected digestion program reaches the specified temperature, a pop-up message will appear accompanied by a buzzer alarm, as shown in the lower-left figure. At this point, open the protective cover, place the corresponding reagents into the digestion block, close the protective cover, and click "OK" to start digestion. The digestion status will then switch to countdown mode, as shown in the lower-right figure.

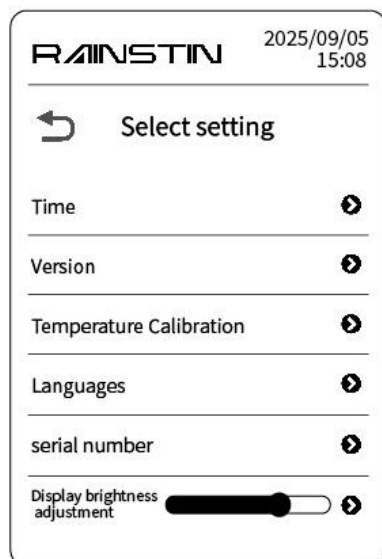


When the countdown ends, a pop-up message will indicate that digestion is complete, accompanied by a buzzer alarm, as shown in the lower-left figure. Click “OK” to finish the digestion process, as shown in the lower-right figure.



5.2 Instrument Settings

Click “SET” on the main interface to enter the settings page, as shown in the figure below.



Time Settings

Click the corresponding area to adjust the system time.

Version Information

Displays the current software, hardware, and screen versions.

Temperature Calibration Settings

Used for calibrating the temperature sensor after long-term use. Calibration must be performed by authorized manufacturer personnel.

Language Settings

Switch between Chinese and English.

Serial Number Settings

Used to set the instrument serial number. The serial number can only be entered once; afterwards, only display is available.

Display Brightness Adjustment

Drag the slider to adjust screen brightness.

6.Packing List

Item	Number
Portable Digestion Instrument	1
24V/10A Adapter	1
Transparent Protective Cover	1
User Manual	1
Warranty Card	1

© Walter Technologies (HK) Limited — For Authorized Use Only