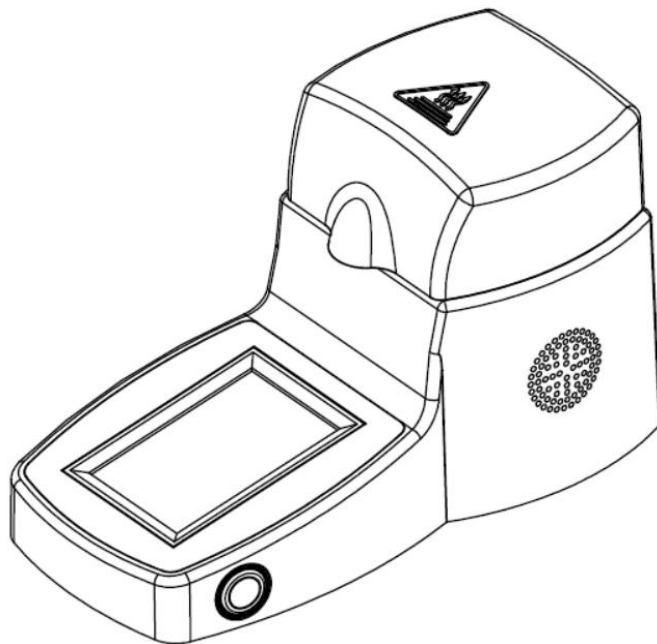


Portable Smart Digestion Instrument

TK-D6

User Manual



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.

Zhongke Tk (Shandong) Intelligent Technology Co., LTD

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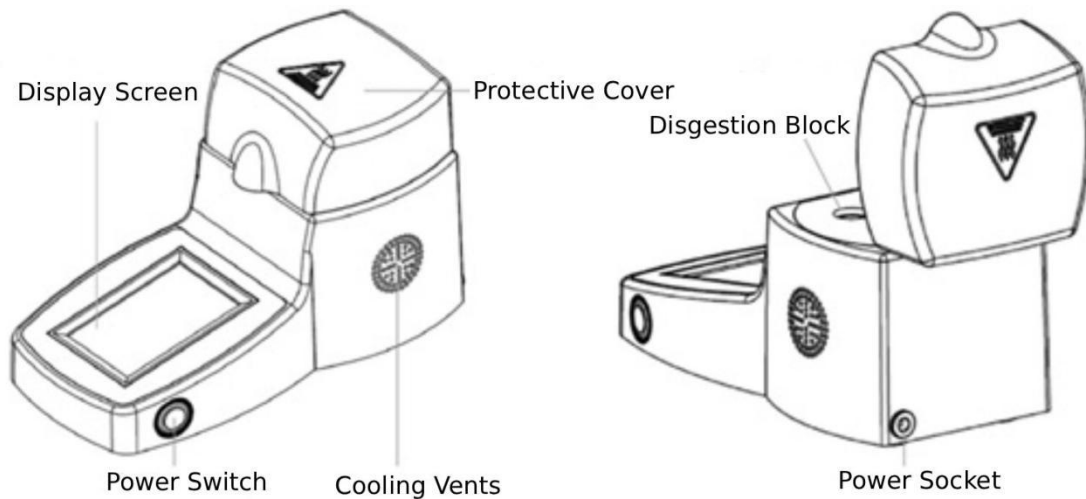
Friendly Reminder

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.

1.Product Introduction

This **Smart Digestion Instrument** is a compact, multi-function 6-well digester designed for on-site and laboratory water quality analysis. Equipped with an intelligent digestion system, it enables one-touch digestion for multiple testing 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. 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	224 × 112 × 142 mm
Weight	1.4 kg

3.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.

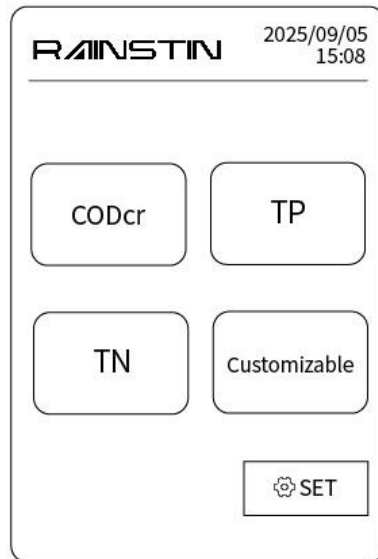
3.2 Warranty

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.

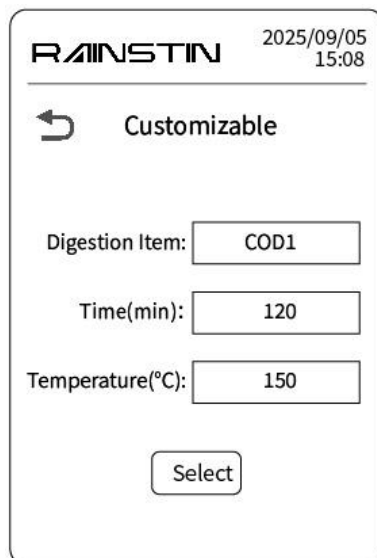
4. Instrument Operation

4.1 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.

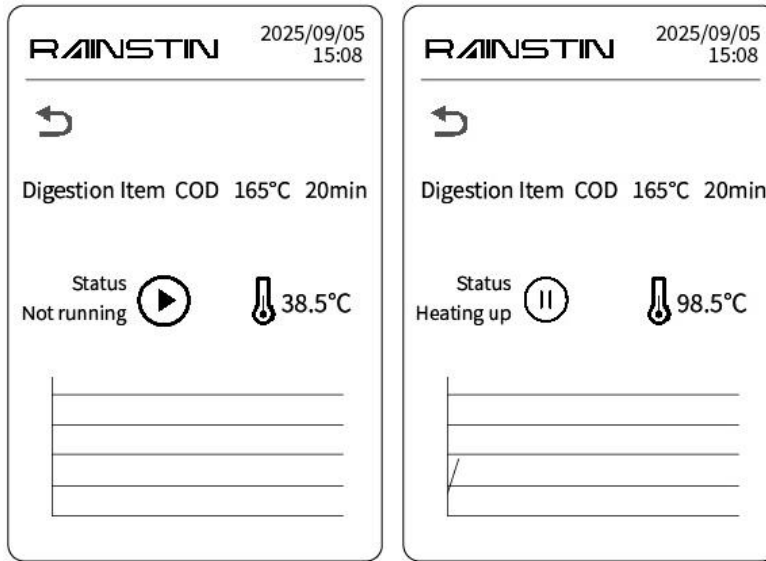




2. Select a preset digestion program or define a custom program if required (Press the "Custom Digestion" button to access the custom digestion interface. Enter the required parameters in the input fields and click "Select" to confirm your custom digestion program). The screen display is shown in the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



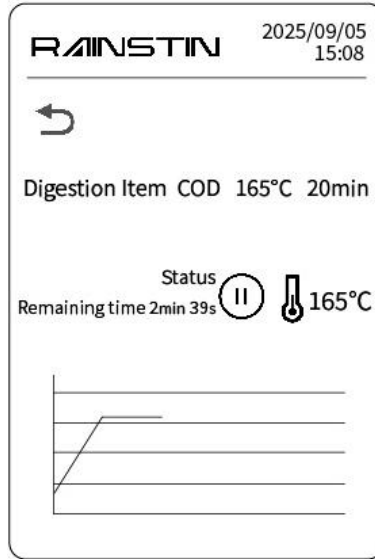
3. Taking COD as an example (other digestion programs follow the same procedure).

Click “COD Digestion” to enter the following interface shown below.

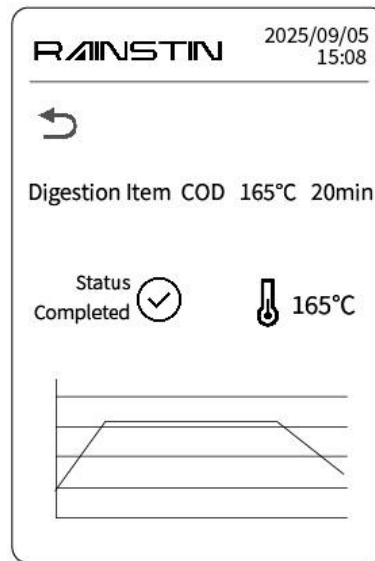


Click the “” button in the upper-left figure to start the heating program. At this time, the instrument enters the heating mode, the thermometer icon turns red, and the current temperature is displayed next to the icon in real time. Press “” to stop heating, as shown in the upper-right figure.

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 “Confirm” to start digestion. The digestion status will then switch to countdown mode, as shown in the lower-right figure.

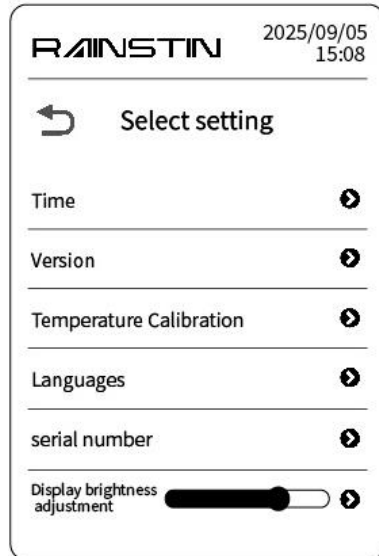


When the countdown ends, a pop-up message will indicate that digestion is complete, accompanied by a buzzer alarm, as shown in the lower-left figure. Click "Confirm" to finish the digestion process, as shown in the lower-right figure.



4.2 Instrument Settings

Click “Settings” 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.

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.

Brightness Adjustment

Drag the slider to adjust screen brightness.

5.Packing List

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

About Zhongke Tk

Zhongke Tk (Shandong) Intelligent Technology Co., Ltd. was founded in 2015, with its headquarters located in Jinan, Shandong Province. It is a high-tech enterprise specializing in the R&D, production, sales and service of water quality analysis equipment.

The company has a professional R&D team. With profound professional knowledge and rich practical experience, the team members continuously promote the innovation and progress of water quality analysis technology to ensure that the products are always at the advanced level of the industry.

Our products cover a variety of water quality analysis equipment, including hydrogen conductivity meter, dissolved oxygen meter, pH meter, conductivity meter, multi-parameter water quality analyzer, etc. At the same time, the company also provides customized solutions for customers, tailoring suitable water quality analysis equipment and monitoring schemes according to their specific needs.

Adhering to the business philosophy of Technological Innovation, Quality First, Service Supreme, we continuously improve product quality and service level, provides customers with suitable water quality analysis equipment and solutions, and makes greater contributions to the development of the water quality analysis industry.

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