Dry Bath WD310/WD320



English Operating Manual

WIGGENS labortechnik GmbH Mühsamstrasse 3610249 Berlin Germany

Fon:+49 30 42105470 E-Mail:info@wiggens.biz Fax:+49 30 42105971 Web:www.wiggens.com



Dry Baths

WD310 / WD320

Congratulations!

You have made an excellent choice.

Wiggens wants to thank you for the trust you have placed in us.

This operating manual has been designed to help you gain an understanding of the operation and possible applications of our instruments. For optimal utilization of all functions, we recommend that you thoroughly study this manual prior to beginning any operation.

The Wiggens Quality Management System



ISO 9001 Certificate Registration No. 01 100084841

Unpacking and Inspection

Unpack the instruments and accessories and inspect them for possible transport damage. Damage should be reported to the responsible carrier, railway, or postal authority, and a damage report should be requested. These instructions must be followed fully for us to guarantee our full support of your claim for protecting against loss from concealed damage. The form required for filing such a claim will be provided by the carrier.

Printed in Germany Changes without prior notification reserved

Important: keep operating manual for future use

Contents

Unpacking and checking	.4
Accessories	
Warnings	
Installation	
Operation	
· Operating	
Temperature Calibration	.6
Order Information	.7
Warranty	.8
Product Liability	.8

Unpacking and checking

Before unpacking this instrument, please check first the packing case is complete without any damage. After unpacking, please check the accessories are complete as list also. If there is any problem in this instrument, please reserve the serial number and packing case, and contact to your local distributor immediately to claim support.

Please discard the packing materials according to your local environmental protection policy.

Accessories

Power cord----- x 1 User Manual ----- x 1

Warnings

- 1. Use a properly grounded electrical outlet of correct voltage and current handing capacity.
- 2. Disconnect from power supply before maintenance and servicing. Refer servicing to qualified personnel.
- In the event that solution is accidentally spilled into the bath, disconnect grounded plug and turn dry bath upside down to avoid solution contacting the internal components. Remove bottom cover and inspect to assure solution has not contacted elements, thermostat or connector. Replace damaged parts.
- 4. Do not use in the presence of flammable or combustible material; fire or explosion may result. This device contains components, which may ignite such materials.
- 5. Ensure that the dry bath is connected to electrical service according to local and national electrical codes. Failure to properly connect may create a fire or shock hazard.
- 6. Always use the supplied handle to remove hot blocks to avoid burning your hand.
- 7. The instrument shall not be modified or altered in any way. Any modification or alteration will void the warranty, void the regulatory certifications and create potential safety hazard.We are not responsible for any injury or damage caused by using the instrument for any non-intended purpose, or modifying the instrument by any person who is not authorized.

Installation

Before installation, please ensure the electronic volts, current, frequency of your socket fits in with the instrument. You can find these information on the back of instrument. The socket should be connected to earth for safety.

Install the instrument in a clean, dust-less and ventilated area under 40°C.

Put desired block into dry bath chamber by using a block lifter.

Connect power cord.

Operation



Figure 1

Function key

- 1. UP Key -- to increase temperature or time value.
- 2. DOWN Key to decrease temperature or time value.
- 3. START/STOP Key activate or stop to the unit.
- 4. TIMER Key set or select timer mode.
- 5. TIMER indicator- This LED light indicates on Timer Mode.
- 6. Set Temp indicator This LED light indicates temperature are on setting value.
- 7. Heating indicator–This LED lamp light up while the unit is heating.





- 8. AC Power Switch to switch the unit power On/OFF.
- 9. AC Power Cord and Fuse Holder Power Cord Socket and Fuse Holder.
- 10. Block lifter holder to hold lifter of block.
- 11. RS232 Connected Port for connecting to computer or data logger.

Operating

Turn the AC power (8)ON.

Press the UP(1) or DOWN(2) key to adjust desired temperature.

Press the START(3) Key to start heating.

Set timer :Press TIMER(4) Key and then press UP(1) or DOWN (2)to adjust timer upon your request., When the temperature achieves the set value, the timer will start to count and will stop running with a 60 seconds beep while time is over. Set 00 for constant running. Press START(3) Key again to stop the unit.

Temperature Calibration

Dry Bath with the optional block has been calibrated as a set. Due to the different kinds of block which the temperature coefficient are not the same .To get accurate result, dry Bath should be calibrated in accordance with the procedure outline below when you change a different kind of block

- 1. Insert a calibrated laboratory Thermometer (45 mm diameter) into the Thermometer holding port which on the block.
- 2. Switch the main power ON and press START key <u>simultaneously</u>. At this time, you will hear a "DU~DU" sound from the Dry Bath. And find a LED segment will be flashing (left down segment). Then the Dry Bath is under Calibrated Mode.

This Segment will be flashing

- 3. Press UP or DOWN key to adjust display value, which you want to accurately control. then press START key.
- 4. Waiting until "all LED" is flashing(around 40~50 min for heating up and become stable).
- 5. Adjust display value to the same as thermometer temperature. Then press START key.
- 6. The calibrated procedure is finished. Please wait for some minute, that microprocessor will adjust the temperature automatically until LED display value is the same as thermometer.

Order Information

179310-22 WD 310 dry bath (one block capacity but without block module),

AC220V,50/60HZ

179320-11 WD 320 dry bath (two block capacity but without block module),

AC220V,50/60HZ

179300-01 block module,0.2 ml,64 well (or 0.2 ml PCR strip tube for 8 x 8 well)

179300-02 block module,0.5 ml ,20 well

179300-03 block module,1.5 ml (or 2.0 ml) ,20 well

179300-04 block module,10 mm diameter ,20 well

179300-05 block module, 13 mm diameter,20well

179300-06 block module, 20 mm diameter,12 well

179300-07 block module,25 mm diameter,6 well

179300-08 combination block module, 0.5 ml x12 well and 1.5 ml x 12 well

179300-09 combination block , one side for 0.5 ml x 30 well and another side 2.0 ml x 20.

179310-01 Software Package for control function, including a RS 232 CableP.S. The block modules above are made of aluminum at size of 104 x 79 x 50 mm(L x W xH)and every block comes with a lifter, Other size modules are available on request.

Warranty

We guarantee the perfect functioning of this instrument against defects in material, design, and workmanship, when use under appropriate conditions and in accordance with the instruction manual for a period of **TWO YEARS** from the date of initial shipment. This warranty covers all parts and components of the instrument except those normally requiring frequent replacement, such as tubing, gasket, O-rings, etc. We will not be liable for any personal injury, misuse, improper maintenance, negligence or accident.

Product Liability

Under no circumstances shall Wiggens be liable for indirect, consequential or otherwise special or unrelated damages of any kind.

Wiggens reserves the right to make technical changes without prior notice.

Email: info@wiggens.biz

Web Site:www.wiggens.&[{