



VWB Water bath

INSTRUCTION MANUAL

European Catalogue Numbers:

VWB 2 462-0240

VWB 6 462-0241

VWB 12 462-0242

VWB 18 462-0243

VWB 26 462-0244



Version: 1
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Legal Address of Manufacturer

Manufacturer :

VWR International bvba

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Country of origin : Germany

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Warning

The device has been produced after the valid rules of technology. It was tested extensively before leaving the production and has left the work in safety technical and function-technical faultless condition. To guarantee safe and faultless application, the user has to take the following notes and the existing regulations for accident prevention into account.

1. The device may be used for the applications confirmed by the manufacturer. Other applications should be checked back with the manufacturer.
2. Packing was carried out with greatest care to make sure that damage by transport and storage is avoided. Upon receipt both packing and device have to be checked for damages. If such damages should be noticed, please advise the manufacturer.
3. Connection and inauguration of the device has to be carried out by qualified staff. The operating instructions have to be studied carefully before putting the device into operation.
4. The operating instructions should be kept at a place accessibly for everyone.
5. The staff for the operation, maintenance and inspection of the device must show the corresponding qualification for this work. The operator is responsible for instructing his staff. He has to take care that everybody knows and understands the contents of the user manual.
6. Service and maintenance have to be carried out by qualified staff only. The device has to be separated from the mains voltage before opening. Having completed the operations and before activating the device all safety precautions have to be checked. Any modification of the device is forbidden. Spare parts have to be decontrolled by the manufacturer.

Any disregard of the safety regulations leads to the loss of warranty claim and claim for damages.

Safety instructions

All water baths are constructed for permanent operation under laboratory conditions.

The water baths meet the safety-related requirements following:



DIN 12876

Electrical laboratory devices – Laboratory circulators and baths

The water baths correspond to the class 1 following DIN 12876-1 and are to be operated **with inflammable thermostat liquids only**.

DIN EN 61010-1

Safety requirements for electrical equipment, control and laboratory use

DIN EN 61326-1

Electromagnetic compatibility

- Environmental conditions between 1° C and +40° C do not affect function and safety of the device.
- The operation temperature should be 10 K higher than the ambient temperature.



- The device is to be attached to an earthed socket only. Please pay attention to the details on the identification plate.



- Place the water bath on a solid ground
- Convince yourself that a sufficient volume of liquid is in the bath before you switch it on.



- Do not transport the water bath with heated liquid inside.



- Cool down the liquid before drain.



- Do not run the device in areas with potentially explosive atmosphere.



- Interruption of the protective ground can make the device dangerous.



- Maintenance and repair work of the device standing under voltage are forbidden.



- All encroachments have to be executed by specialist staff only considering appropriate regulations.



- Please use the fuses described by the manufacturer. Short circuit of the fuse holder is forbidden.



Attention: You should not run the device if strong damages are visible.

Package contents

Description	Quantity
Water bath VWB	1
Lid for water bath	1
Power cord	1
Instruction manual	1

Unpacking

After unpacking the water bath and the accessories the scope of delivery has to be checked with the delivery note enclosed. In case of damages in transit please inform the carrier responsible to place a damage protocol if necessary.

Intended use

VWR VWB waterbaths are designed for tempering of water in a bath tank for laboratory applications. The baths are not designed for tempering of food, pharmaceuticals, medico-technical products or other products where the product is in unprotected contact with the bath medium. The water baths are produced double walled. Bath container are made of stainless steel, the housing consists of coated steel sheet.




An electronic PID-controller with digital temperature setting guarantees high temperature stability. Automatic temperature monitoring is possible with the timer installed. After course of the time set, a signal is given by the timer - the water bath will keep the temperature further on.

The protection against 'running dry' integrated in the radiator cannot be adjusted. It will switch off the heater. The water bath can be switched on again after refilling liquid and a few minutes waiting time.

Note: *The device is classified to safety class 1. This allows unattended operation in combination with not inflammable liquids.*

Symbols and conventions

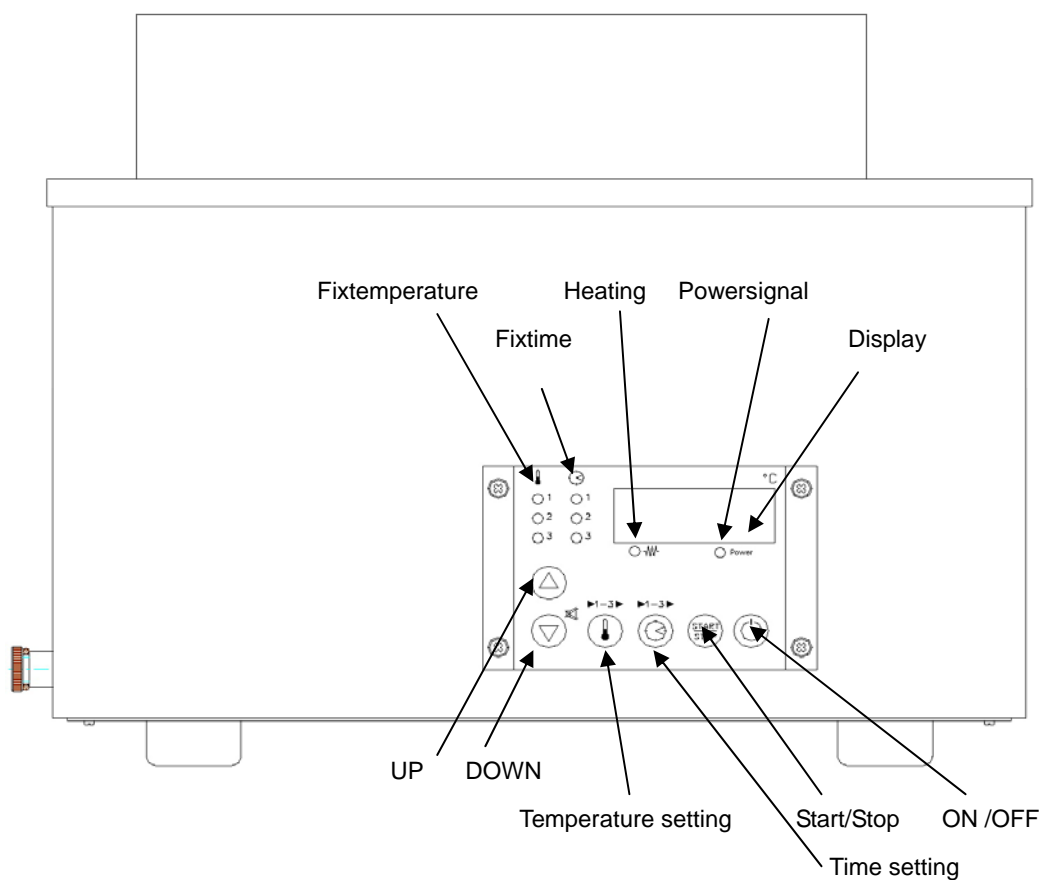
The following chart is an illustrated glossary of the symbols that are used in this manual.

	CAUTION This symbol indicates a potential risk and alerts you to proceed with caution
	CAUTION This symbol indicates the presence of high voltage and warns the user to proceed with caution
	CAUTION This symbol indicates risks associated with hot surfaces

Specification

	VWB 2	VWB 6	VWB 12	VWB 18	VWB 26
Temperature range °C	40...100	40...100	40...100	40...100	40...100
Bath capacity Liter	1...2	2...6	4...12	6...18	8...26
Bath opening mm	300 x 150	300 x 150	300 x 325	505 x 300	505 x300
Bad depth mm	100	150	150	150	200
Heating Watt	500	500	1000	1600	1600
Power supply V/Hz	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60	230 / 50-60
Fuse protection	4	4	6	6	8
Dimension mm	350x215x290	350x215x290	350x375x290	570x405x290	570x405x340
Allowed ambient °C	1..40	1..40	1..40	1..40	1..40
Temperature accuracy	± 0,2K	± 0,2K	± 0,2K	± 0,2K	± 0,2K

Overview



Operational keys



Button UP



Button DOWN



START/STOP



STANBY



Temperature setting



Time setting

Getting started

- place the water bath safely against overturning
fill up the bath with distilled or decalcified water up 20 mm over the bottom as minimum
- **Do not use any inflammable liquid!**
- connect the device to a power supply and switch power 'on' in the backside of the device
- push the ON/OFF button in the controller
- set the temperature and time values desired for your application
- run your application with the START button
- before emptying the liquid should cool down. Remove drain screw or open drain cock to start water runoff



Attention ! The liquid can be hot.



Main switch and fuse holder in the backside

Operation



Button UP

Pressing this key you can increase the parameter (temperature or time) .



Button DOWN

Pressing this key you can decrease the parameter the parameter (temperature or time).

In case of alarm the buzzer function can be switched off with this key.



Time setting

With this key the temperature setpoint can be selected. If - previously - the timer display is or has been active, the controller switches to temperature display with first key pressing.



Temperature setting

With this key the time setpoint relevant for the timer is selected. If - previously - the temperature display is or has been active, the controller switches to timer display with first key pressing.



START/STOP

With this key the selected heating time is started. The display indicates the remaining time. After course of time set the timer gives a signal for 5 seconds. The timer can be switched off with the DOWN key. The elapsing timer has no influence on regulation - the temperature will be hold.

After any restart of the timer, it can be cancelled by pressing the key for at least 2 seconds.

With 'parameter settings' the remaining time displayed can be suppressed. In this case the display switches to temperature display after 3 seconds and the LED of the timer flashes to indicate that it is activated.



STANDBY

With this button you can switch on and off the controller. If it set off the water bath is in Standby. The temperature in the display is blinking until it is cool down under 50°C.



The yellow lamp lights when the bath heats.



The red lamp lights when the bath is connected to the power supply.

Troubleshooting

Signal	Problem	Activity
F1 in the display	Temperature sensor broken	Call the service
EP in the display	Controller defect	Call the service
Flashing display, Controller on	Boundary or range alarm	Check the settings
Flashing display, Controller off	Warning of residual heat Standby, Temperature >50°C	
No heating	No power	Check the fuse an the power supply
Summer	Temperature alarm	Check the settings Press DOWN button to quit

Maintenance and repairs

Maintenance and care can only be performed by qualified personal.



Turn off the device and unplug the power cable, note the temperature of the liquid.

Clean up the bath regularly (about twice a year).

Replace the liquid once a month. Clean up the tool panels using only a damp cloth, never use a detergent solution.

After having completed the maintenance and care operations, the bath can be plugged in and started up as described previously.

Optional accessories

Flat lid 2/6	1 opening	d=130mm	1 set 6pcs. water bath rings	ECN 462-0259
Flat lid 12	3 opening	d=130mm	3 sets 6pcs. water bath rings	ECN 462-0260
Flat lid 18/26	4 opening	d=130mm	4 sets 6pcs. water bath rings	ECN 462-0261

For VWB 2 :

			number per bath	
RG 10 S	56 holes	10mm	1 pcs.	ECN 462-0245
RG 12 S	48 holes	12mm	1 pcs.	ECN 462-0246
RG 14 S	33 holes	14mm	1 pcs.	ECN 462-0247
RG 18 S	18 holes	18mm	1 pcs.	ECN 462-0248
RG 25 S	12 holes	25mm	1 pcs.	ECN 462-0249
RG 35 S	6 holes	35mm	1 pcs.	ECN 462-0250
RG 50 S	3 holes	50mm	1 pcs.	ECN 462-0251

For VWB 6 / VWB 12 / VWB 18 / VWB 26

			number per bath			
			VWB 6	VWB 12	VWB 18 / 26	
RG 10 S	56 holes	10mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0252
RG 12 S	48 holes	12mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0253
RG 14 S	33 holes	14mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0254
RG 18 S	18 holes	18mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0255
RG 25 S	12 holes	25mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0256
RG 35 S	6 holes	35mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0257
RG 50 S	3 holes	50mm	1 pcs.	4 pcs.	6 pcs.	ECN 462-0258

Level controller KR 1 for water bath **ECN 462-0262**

Technical Service

Web Resources

Visit the VWR's website at www.vwr.com for:

- Complete technical service contact information
- Access to VWR's Online Catalogue, and information about accessories and related products
- Additional product information and special offers

Contact us For information or technical assistance contact your local VWR representative or visit. www.vwr.com.

OR

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Warranty

VWR International warrants that this product will be free from defects in material and workmanship for a period of two (2) years from date of purchase. If a defect is present, VWR will, at its option, repair, replace, or refund the purchase price of this product at no charge to you, provided it is returned during the warranty period. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication, or from ordinary wear and tear. For your protection, items being returned must be insured against possible damage or loss. This warranty shall be limited to the replacement of defective products. IT IS EXPRESSLY AGREED THAT THIS WARRANTY WILL BE IN LIEU OF ALL WARRANTIES OF FITNESS AND IN LIEU OF THE WARRANTY OF MERCHANTABILITY.

Equipment disposal



This equipment is marked with the crossed out wheeled bin symbol to indicate that this equipment must not be disposed of with unsorted waste.

Instead it's your responsibility to correctly dispose of your equipment at lifecycle -end by handling it over to an authorized facility for separate collection and recycling. It's also your responsibility to decontaminate the equipment in case of biological, chemical and/or radiological contamination, so as to protect from health hazards the persons involved in the disposal and recycling of the equipment.

For more information about where you can drop off your waste of equipment, please contact your local dealer from whom you originally purchased this equipment.

By doing so, you will help to conserve natural and environmental resources and you will ensure that your equipment is recycled in a manner that protects human health.

Thank you

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