



Microbiological Incubator

VWR Digital Incubator

INSTRUCTION MANUAL

North American Catalogue Numbers:

10055-006 Digital Incubator Personal Sized 115V
10054-476 Digital Incubator Personal Sized 230V

Version: 1

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Legal Address of Manufacturer

North America

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Country of origin: SLOVENIA

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Warning

Configuring and operating this equipment requires **precise knowledge** and **observance** of the instructions in this **user manual**. The equipment is designed only for its intended application.

Important safety symbols used in this manual:



Warning!

This is a warning of risk situations and dangers. Failure to observe this warning could be life-threatening. These warnings must be heeded.



This equipment is designed for 115V (50/60Hz) or 230V (50/60Hz).

Make sure it is connected to the correct power supply.

Disconnect the power cord before carrying out maintenance or cleaning work.

Safety Information

The responsibility for operating the equipment lies exclusively with the owner or user if said equipment is incorrectly serviced, maintained or altered by persons not employed by an authorized dealer, or if the equipment is used in a manner contrary to its specified purpose.

The equipment must be maintained and operated in accordance with this user manual.



Ensure that this user manual is accessible at all times and has been read and understood.



To avoid electric shock do not spill any liquids on the equipment.

Package Contents

Description	Quantity
Digital Incubator	1
Stainless steel shelf	1
Power cord	1

Unpacking

Carefully inspect the unit and accessories thoroughly upon receipt for any damage that may have occurred during shipping. Severe damage to the packaging container may indicate damage to the unit. If you suspect damage to the unit, immediately file a claim with the carrier in accordance with their instructions before contacting VWR. Also verify that all accessories are included and that the unit is in good working order before discarding the shipping packaging.

Installation



Your satisfaction and safety require a complete understanding of this unit. Read the instructions thoroughly and be sure all operators are given adequate training before attempting to put the unit in use.

NOTE: This equipment must be used only for its intended application; any alterations or modifications will void your warranty and may cause injury.




Intended use

VWR Digital Incubator is a compact general purpose convection incubator capable of uniformly heating samples up to a maximum of 70 °C. The unit has a door window area, so the samples can be observed without opening the door, thus preventing heat loss.

For research use only. Not intended for any animal or human therapeutic or diagnostic use.

Symbols and conventions

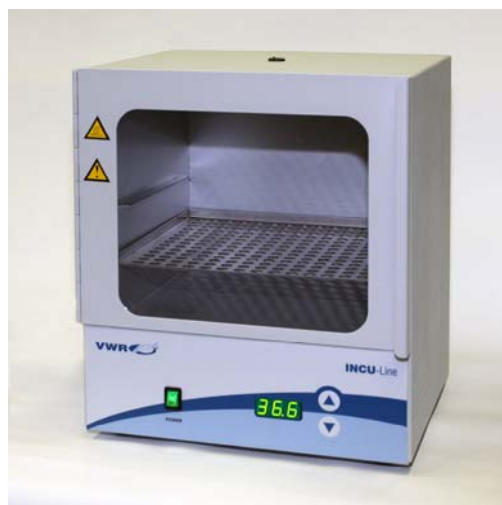
The following chart is an illustrated glossary of the symbols that are used in this manual.

	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.

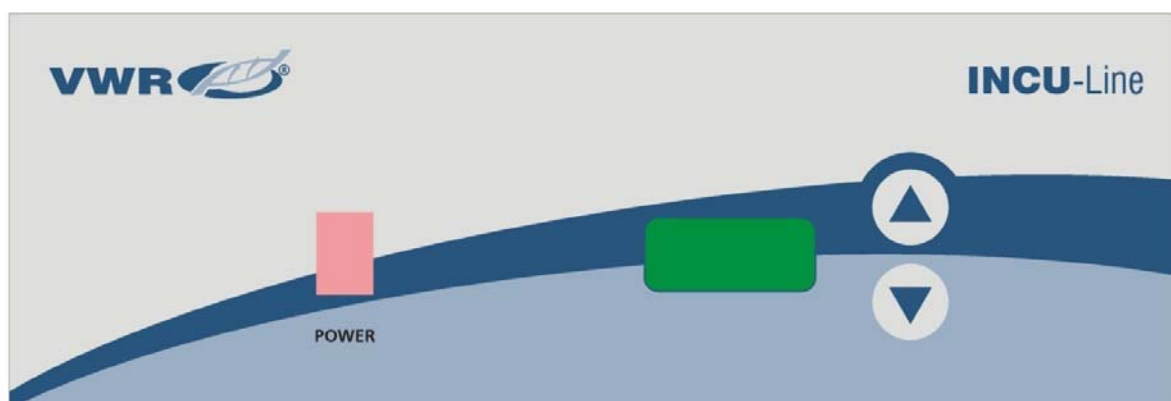
Product Specifications

Specifications	Digital Incubator 115V	Digital Incubator 230V
Electrical	115V, 50/60 Hz, 0.6 A	230V, 50/60 Hz, 0.3 A
Controls	PID control	PID control
Temperature range	Ambient +5 °C to +70 °C	Ambient +5 °C to +70 °C
Temperature accuracy at 37 °C	± 0.5 °C	± 0.5 °C
Temperature stability at 37 °C	± 0.5 °C	± 0.5 °C
Environment temperature	+15 °C to +40 °C	+15 °C to +40 °C
Interior volume	10 l	10 l
Exterior dimensions w x d x h (mm)	285 x 280 x 335	285 x 280 x 335
Interior dimensions w x d x h (mm)	230 x 220 x 200	230 x 220 x 200
Weight	8.3 kg	8.3 kg

Overview



Description of front panel



POWER - power switch: For turning the incubator ON and OFF. It lights when incubator is switched ON.

▲ - UP key: For increasing the temperature.

▼ - DOWN key: For decreasing the temperature.

Display: For displaying the temperature (dot blinks when you set the temperature).

Instructions for use

Getting Started

Check the data plate for voltage, cycle, wattage and ampere requirements. If matched to your power source, plug the power cord into a grounded outlet. Voltage should not vary more than 10% from the data plate rating.

In selecting a location, consider all conditions which might affect performance, such as heat from radiators, autoclaves, etc. Avoid direct sun, fast-moving air currents, heating/cooling ducts and high traffic areas. Allow a minimum of 5 cm between the unit and walls or partitions which might obstruct free airflow.

Operation



Do not use this incubator in explosive or flammable environments. Do not heat or incubate flammable, explosive or highly reactive materials in this incubator as serious injury may result.

Place the unit on a level surface and plug the unit into a properly grounded outlet of appropriate voltage.

Install the shelf at the desired height, with the shelf edges up. If you intend to place the samples on the bottom of the chamber, install the shelf so that it sits with the edges down on the chamber bottom, thus creating an air gap between the chamber bottom and your samples.

Place the samples in the chamber and close the door. Make sure the door is securely closed.

Push the power switch to the ON position. The switch should illuminate. On display incubator automatically detect supply frequency F50 or F60. Incubator starts to heat.

Set desired temperature with UP or DOWN key. You must hold UP or DOWN key for more than 2 sec. DOT on DISPLAY blinks. When DOT starts to blink (dot blinks for 5 sec) set temperature to desired value between room temperature +5 °C to +70 °C. When desired temperature is set, display will automatically show momentary temperature after 2 sec.

You can always check the SET temperature by holding UP or DOWN key for more than 2 sec.

Temperature re-adjustment

Incubator has software for temperature re-adjustment. You must first measure temperature in middle of chamber or in sample for minimum 2 hours. You must measure temperature with a certificated reference temperature measuring instrument with precision 0.1 °C or more. After 2 hours or more read temperature on thermometer and compare it with temperature on LED display. Difference from thermometer and display is value, which you will enter in software.

Example 1: Reference temperature is 37,9 °C, temperature on display is 37 °C. Difference is $37,9 - 37 = 0.9$
Value is 0.9 (value which you enter in software).

Example 2: Reference temperature is 36,2 °C, temperature on display is 37 °C. Difference is $36,2 - 37 = -0.8$
Value is -0.8 (value which you enter in software).

Procedure for temperature re-adjustment:

Press UP and DOWN key at the same time for more than 5 seconds – on display appears **Cor** (correction) and DOT blinks.

With UP or DOWN key define value (when dot blinks). Pay attention on sign of value (plus or minus). After 5 sec when you will define temperature display will automatically show temporary temperature.

Troubleshooting

Review the information in the table below to troubleshoot operating problems.

Problem on display	Cause	Solution
Er1	Temperature probe fault, electronic board fault or incorrect setting of parameters.	Contact your distributor.
Er2	Momentary temperature in the incubator is at least 5 °C higher than SET temperature, because the incubator has been working at higher SET temperature recently.	Check if SET temperature is for 5 °C, or more, lower than momentary temperature in the incubator. If so, allow incubator to cool down. Turn the power switch off and on, then try again.
	Momentary temperature in the incubator is at least 5 °C higher than SET temperature, due to temperature probe fault, electronic board fault or incorrect setting of parameters.	Contact your distributor.
Er3	Momentary temperature does not reach SET temperature in 2 hours, because the door is opened, you open the door too frequently or the environment temperature is too low.	Check that the door is securely closed, don't open the door too frequently during operation, check that environment temperature is above minimum. Turn the power switch off and on, then try again.
	Momentary temperature does not reach SET temperature in 2 hours, due to thermal fuse cut off, heater fault, electronic board fault or incorrect setting of parameters.	Contact your distributor.

Cleaning and maintenance



Prior to any cleaning or maintenance of the unit, disconnect the power cord from the wall outlet.

No routine maintenance is required on the unit.

Clean the unit internally and externally with a damp cloth and mild soap. Do not immerse the unit or spill liquids into or on the unit. Use of alcohol or ammonia-based cleaners on the window may cause the window to craze. Allow the incubator to dry completely inside and out before reconnecting the power and using.

Accessories

Description	Quantity	Cat. No.
Extra Shelf for Digital Mini Incubator	1	10065-864
Tube Rack for dip slides, digital	1	10065-440

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.

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