Instructions for Use

Leica HI1210

Water Bath

CE

Leica HI1210 V 3.4 , English 09/2018
Order No.: 14 0415 80101 RevI

Always keep this manual with the instrument.

Read carefully before working with the instrument.

The information, numerical data, notes and value judgments contained in this manual represent the current state of scientific knowledge and state-of-the-art technology as we understand it following thorough investigation in this field.
We are under no obligation to update the present manual periodically and on an ongoing basis according to the latest technical developments, nor to provide our customers with additional copies, updates etc. of this manual.
To the extent permitted in accordance with the national legal system as applicable in each individual case, we shall not be held liable for erroneous statements, drawings, technical illustrations etc. contained in this manual. In particular, no liability whatsoever is accepted for any financial loss or consequential damage caused by or related to compliance with statements or other information in this manual.
Statements, drawings, illustrations and other information regarding the contents or technical details of the present Instructions for Use are not to be considered warranted characteristics of our products.
These are determined only by the contract provisions agreed between ourselves and our customers.
Leica reserves the right to change technical specifications as well as manufacturing processes without prior notice. Only in this way is it possible to continuously improve the technology and manufacturing techniques used in our products.

For the instrument serial number and year of manufacture, please refer to the nameplate on the back of the instrument.

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1.1 Symbols and their meanings

Warnings appear in a gray box and are marked by a warning triangle ⚠.

Notes,
i.e. important user information, appear in a gray box and are marked by an information symbol i.

(5)

Numbers and parentheses refer to item numbers in the illustrations.

START

Function keys to be pressed on the instrument touch screen are in bold-print capital letters.

Instrument surfaces which become hot during operation are marked with this symbol.
Avoid direct contact with these surfaces - they may cause burns.

Manufacturer

Date of manufacture

Observe the instructions for use!

SN Serial number

REF Order no.

The CE labeling shows that the product corresponds to one or more applicable European directives.

Caution, consult the instructions for use for cautionary information.

Environmental protection symbol of the China RoHS directive. The number in the symbol indicates the "Environment-friendly Use Period" of the product. The symbol is used if a substance restricted in China is used in excess of the maximum permitted limit.

Symbol for labeling electrical and electronic equipment in accordance with Section 7 of the German Electrical and Electronic Equipment Act (ElektroG). ElektroG is the law regarding the sale, return and environmentally sound disposal of electrical and electronic equipment.

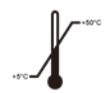
The package contents are fragile and must be handled with care.

The package must be kept in a dry environment.

Indicates the correct upright position of the package.

It allows maximum 3 stacks layers.

Indicates the temperature range permitted for transporting the package.
Minimum -29 °C, Maximum +50 °C



Indicates the temperature range permitted for storing the package.
Minimum +5 °C, Maximum +50 °C

Indicates the humidity range permitted for storing and transporting the package.
Minimum 10 % r.H., Maximum 85 % r.H

Indicates the item can be recycled where correct facilities exist.

The Regulatory Compliance Mark (RCM) indicates a device's compliance with applicable ACMA technical standards of New Zealand and Australia - that is, for telecommunications, radio communications, EMC and EME.

1.2 Qualification of personnel

- The Leica HI1210 may be operated by trained laboratory personnel only.
- All laboratory personnel designated to operate this instrument must read these Instructions for Use carefully and must be familiar with all technical features of the instrument before attempting to operate it.

1.3 Intended use of instrument

The Leica HI1210 is a paraffin flotation bath for flattening and drying cut tissue samples used in all fields of biomedical research and routine diagnostics. It may only be used by Leica Biosystems Nussloch GmbH for operating approved instrument accessories.

Any use of the instrument other than its designated use is considered improper.
Failure to adhere to these instructions may result in an accident, personal injury, damage to the instrument or accessory equipment.
Proper and intended use includes compliance with all inspection and maintenance instructions, along with the observance of all instructions in the Instructions for Use.

1.4 Instrument type

All information provided in these Instructions for Use applies only to the instrument type indicated on the cover page.

A nameplate indicating the instrument serial number is attached to the rear side of the instrument.

2.1 Safety notes

- **The safety and caution notes in this chapter must be observed at all times.**
- **Be sure to read these notes even if you are already familiar with the operation and use of other Leica products.**
- **The protective devices located on the instrument and the accessories must not be removed or modified. Only qualified service personnel authorized by Leica may repair the instrument and access its internal components.**

Residual risks

- **The instrument has been designed and constructed with the latest state-of-the-art technology and according to recognized standards and regulations with regard to safety technology. Operating or handling the instrument incorrectly can place the user or other personnel at risk of injury or can cause damage to the instrument or other property. The instrument may be used only as intended and only if all of its safety features are in proper working condition. Malfunctions which could impede safety must be remedied immediately.**
- **Only original spare parts and permitted original accessories may be used.**

The instrument MUST be connected to a grounded power socket. Use only a provided power cable that is intended for the local power supply.

These Instructions for Use include important instructions and information related to the operating safety and maintenance of the instrument.
The Instructions for Use are an important part of the product, and must be read carefully prior to startup and use and must always be kept near the instrument.

These Instructions for Use must be appropriately supplemented as required by the existing regulations on accident prevention and environmental safety in the operator's country.

This instrument has been built and tested in accordance with the safety requirements for electrical equipment for measurement, control, and laboratory use.
To maintain this condition and ensure safe operation, the user must observe all notes and warnings contained in these Instructions for Use.

The instrument's CE certificate can be found on the Internet at:
http://www.LeicaBiosystems.com

2.1 Safety notes (continued)

- In order to properly service the instrument, it is indispensable to read the User Manual before switching on the instrument and to familiarize yourself with all technical details.
- Before connecting the instrument to the line voltage, ensure that the electrical power requirements of your laboratory match the values on the nameplate of the instrument.
- When installing the power cable, always be sure to route it so that it cannot contact the heated surfaces of the instrument at any time.
- The instrument is designed for indoor use only.
- The instrument must be switched off and unplugged from the power supply during all repair and service work.
- During operation, the instrument surface can be very hot.

Risk of injury!
Do not store any combustible and flammable substances near the instrument.
The instrument may be operated with non-flammable liquids (preferably distilled water) only!
Operate the instrument in filled condition only.
Minimal filling level: 1 cm

2.2 Warnings

The safety devices installed in this instrument by the manufacturer only constitute the basis for accident prevention. Operating the instrument safely is, above all, the responsibility of the owner, as well as the designated personnel who operate, service or repair the instrument.
To ensure trouble-free operation of the instrument, make sure to comply with the following instructions and warnings.
Please note that electrostatic charge may result through direct or indirect contact with the Leica HI1210.

3.1 Technical data

Nominal supply voltages:	Two factory-preset voltages (not user-adjustable): 100-120 VAC ± 10 % 230-240 VAC ± 10 %
Nominal frequency:	50/60 Hz
Nominal power:	350 VA
Main fuse:	2 melting fuses, 5x20 mm, UL-approved For 100-120 V: 5x20 mm, 2x T 5A L250 VAC For 230-240 V: 5x20 mm, 2x T 2,5A L250 VAC
Dimensions:	350x310x100 mm
Empty weight:	3.6 kg (w/o packaging)
Relative humidity:	20-80 %, non-condensing
IEC 1010 classification:	Protection class: 1 Pollution degree: 2 Overvoltage category: II
Operating temperature range:	+15 °C to +40 °C
Temperature control range:	Room temperature to 75 °C
Operating elevation:	maximum of 2000 m above sea level
IP protection class (IEC 60529):	IP20

4.1 Location conditions

- When installing the power cable, always be sure to route it so that it cannot contact the heated surfaces of the instrument at any time.
- The power socket to which the instrument is to be connected to has to be located near the instrument and easily accessible.
- The power supply must be at a distance no greater than the length of the power cable – an extension cable must NOT be used.
- The substrate must be largely vibration-free and have sufficient load capacity and rigidity for the weight of the instrument.
- Avoid impacts, bright direct light, and excessive temperature fluctuations.
- The instrument must be connected to a suitable power socket.Use only the provided power cable, which is intended for the local power supply.

4.2 Standard delivery

The Leica HI1210 standard delivery includes:

1 Leica HI1210 basic instrument
1 Dust cover 14 0415 41178
1 Set of fuses:
2 fuses, T2.5A 14 6943 02500
2 fuses, T5A 14 6943 05000
1 Instructions for Use, printed (English,
with Language CD 14 0415 80200) 14 0415 80001

The country specific power cord needs to be ordered separately. Please find a list of all power cords available for your device on our website www.LeicaBiosystems.com within the product section.

Check the delivery carefully against the packing list, delivery note and your order. Should you find any discrepancies, please contact your Leica sales office without delay.

4.3 Unpacking and setting up the HI1210

Set the carton on a flat surface, cut through the adhesive tape (**Fig. 2**) and open the carton (**Fig. 3**).

Fig. 2


Fig. 3

Remove the accessories and carefully lift the instrument out of the carton (**Fig. 4**).

Hold the instrument firmly with one hand, pull off both foam sections (**Fig. 5**) and remove the dust cover.


Fig. 4

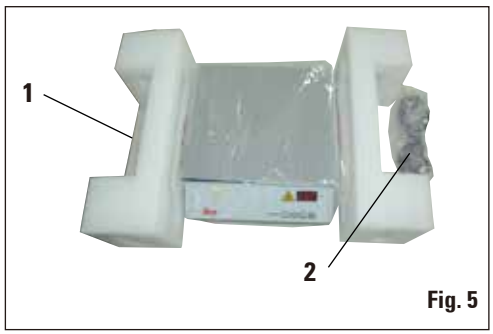


Fig. 5

4.4 Setting up the power supply

- Before connecting the power cable, make sure that the power switch (**3**) on the rear of the instrument (**Fig. 6**) is switched to"**0**" = **OFF**.
- Use the instrument with the provided power cable only.
- Insert the connector of the power cable (**Fig. 5**,**2**) into the connection socket (**4**) and plug the power plug into the power socket.

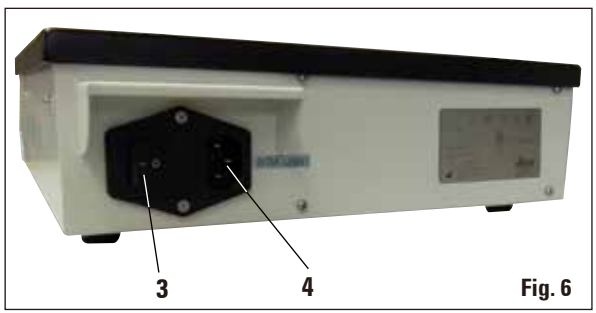


Fig. 6

5.1 Control panel fields on the instrument

5 = **POWER LED**

Is illuminated when the instrument is switched on with the main power switch.

6 = **SET**

Indicates the selected target temperature.

7 = Set key: lower temperature.

8 = Set key: increase temperature.

9 = **RUN/STOP**

Switch instrument on or off.

10 = Display

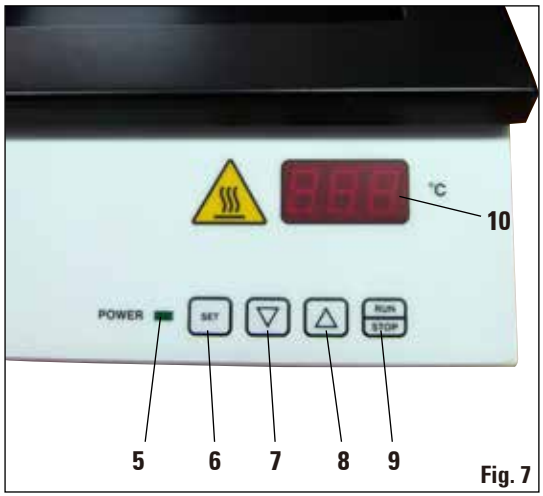


Fig. 7

5.2 Switching the instrument on

- Before switching the instrument on, fill the water bath with a sufficient quantity of distilled water.
- Switch on the instrument with the power switch on the left rear panel of the instrument (**Fig. 6, 3**).
- The green LED display **POWER** on the front panel is then illuminated.

5.3 Setting the temperature

- Pressing the **RUN/STOP** button on the front panel brings the temperature of the instrument to the latest stored target value. The displayed temperature corresponds to the current actual value.
- The set target temperature is shown in the display (**Fig. 7, 10**).
- To adjust to the desired temperature, hold down the corresponding set key (**Fig. 7, 7+8**). The display changes slowly for the first 8 digital steps, then more quickly after that.

The temperature display refers to the target value. After the desired temperature is reached, release the set key. The displayed value is saved automatically. This stored target value will continue to be displayed for about 2 seconds, then the current actual temperature display will appear again.

- The target temperature can be checked by pressing the **SET** key (**Fig. 7, 6**).

The target value remains saved both when the instrument is switched off (RUN/STOP key or power switch) and in case of power failure and disconnection from the power supply.

5.4 Switching off the instrument

- The instrument can be switched off by pressing the **RUN/STOP** key.

You do not have to switch the main power switch on or off each time for everyday routine use.

6. Cleaning and Maintenance

6.1 Cleaning the instrument

- Before cleaning the instrument, turn off using the power switch (**Fig. 6, 3**) and disconnect from the power supply.
- The instrument has a continuous front panel and no lateral cooling slots, so the surfaces are smooth and easy to clean.
- All surface materials are resistant to common laboratory detergents.

The instrument must be switched off and have cooled down for cleaning.

Do not use organic solvents (e.g. alcohol or xylene)!

6.2 Replacing fuses

Switch the unit off and unplug it. Use only the supplied replacement fuses. Both fuses must have the same rating (check the imprint!). Fuses must always be switched out in pairs.

- Insert a small screwdriver into the cutout (**Fig. 8, 11**) and carefully pry out the fuse insert (**12**).
- Remove the fuse holder and replace the defective fuses with two new ones (**13**).
- Then reinsert the fuse holder and press it into place.

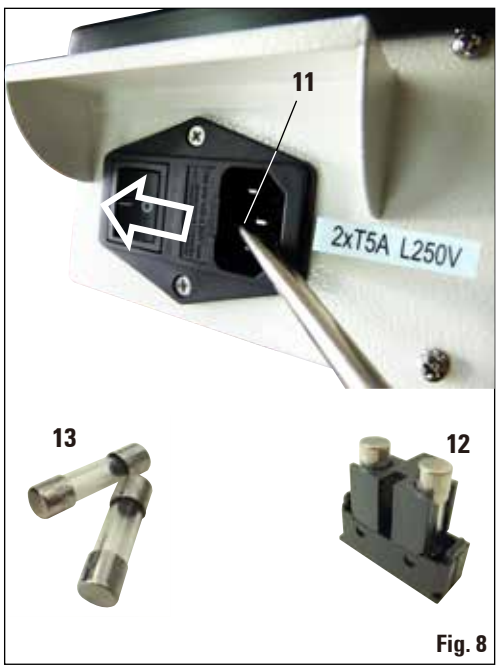


Fig. 8

Warranty

Leica Biosystems Nussloch GmbH guarantees that the contractual product delivered has been subjected to a comprehensive quality control procedure based on the Leica in-house testing standards, and that the product is faultless and complies with all technical specifications and/or characteristics warranted.
The scope of the warranty is based on the content of the concluded agreement. The warranty terms of your Leica sales organization or the organization from which you have purchased the contractual product shall apply exclusively.

Service information

If you require technical service or replacement parts, please contact your Leica sales office or dealer who sold the product.

The following inputs are required:

- Model name and serial number of the instrument.
- Location of the instrument and name of the person to contact.
- Reason for the service call.
- Date of delivery.

Shutdown and disposal of the instrument

The instrument or parts of the instrument must be disposed of in compliance with the local laws.
Special attention should be paid to the lithium cell of the electronic circuit board!

8. Decontamination Confirmation

Every product that is returned to Leica Biosystems or that requires on-site maintenance must be properly cleaned and decontaminated. You can find the dedicated template of the decontamination confirmation on our website www.LeicaBiosystems.com within the product menu. This template has to be used for gathering all required data.
When returning a product, a copy of the filled and signed confirmation has to be enclosed or passed on to the service technician. The responsibility for products that are sent back without this confirmation or with an incomplete confirmation lies with the sender. Returned goods that are considered to be a potential source of danger by the company will be sent back at the expense and risk of the sender.

www.LeicaBiosystems.com

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