

Instructions for Use

Leica EG F

Heatable forceps



Instructions for Use

Leica EG F V1.4 English – 07/2016

Order No. 14 0388 83101, RevE

Always keep this manual near the instrument.

Read carefully prior to operating the instrument



NOTE

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 as regards contents or technical details of the present Instructions for Use are not to be considered as 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.

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

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1.1 Symbols in the text 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 .

(5)

Numbers in parentheses refer to item numbers in illustrations.



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



Symbol for alternating current



Manufacturer.



Date of manufacture



Caution, consult the instructions for use for cautionary information.



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.



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



Environmental protection symbol of the China RoHS directive.

The number in the symbol indicates the "Environment-friendly Use Period" of the product in years.

The symbol is used if a substance restricted in China is used in excess of the maximum permitted limit.



Observe the Instructions for Use!



Fig. 1 is provided as an example only and shows a valid nameplate for this instrument with the necessary information about instrument type and power requirement. The precise data for the various versions is specified in [Chapter 4.3, "Specifications"](#).



Required information for all inquiries

A name plate with the instrument serial number is attached to the side panel of the instrument. The illustration is intended as an example only.

Fig. 1

1. Important Information

REF Order number for standard delivery or accessories.

SN Designates the serial number of the instrument.



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



The package must be kept in a dry environment.



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 EG F (heatable forceps) 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 EG F is an electrical heatable forceps used for transferring and orienting histological tissue samples.

Any use of the instrument other than its designated use is considered improper.



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.



The safety and caution notes in this chapter must be observed at all times. Be sure to read these instructions, even if you are already familiar with the operation and use of other Leica products.

2.1 Safety instructions

These Instructions for Use include important instructions and information related to the operating safety and maintenance of the instrument.

In order to maintain this condition and ensure safe operation, the operator must observe all the instructions and warnings contained in this instruction manual.

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.



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.



The protective devices located on the instrument and the accessories must not be removed or modified. Only service personnel qualified by Leica may repair the instrument and access the instrument's internal components.



Use only the provided power cable - this must not be replaced with a different power cable. If the power plug does not fit in your socket, contact our service.



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 that impede safety must be remedied immediately.



For current information about applicable guidelines, please refer to the CE declaration of conformity and on our Internet site at:

<http://www.LeicaBiosystems.com>

2. Safety

2.2 Warnings

To ensure perfect operation of the instrument, the following safety instructions and warnings must be observed:



The instrument must be connected to mains only with one of the supplied power cords and only to grounded sockets. Do not interfere with the grounding function by using an extension cord without a ground wire.

Extreme temperature fluctuations between storage facility and setup site as well as high humidity may cause condensation to form. In this case, a two-hour waiting period must be maintained before switching on the instrument. Failure to observe the waiting period may result in damage to the instrument.

The instrument may only be operated by trained laboratory personnel.

It must only be operated for the purpose of its designated use and according to the instructions contained in these Instructions for Use.

The instrument may be opened for maintenance or repair work by authorized service technicians only.

Switch the instrument off and unplug it before each cleaning.

Do not use any solvent containing acetone or xylene for cleaning.

When using cleaners, please comply with the safety instructions of the manufacturer and the laboratory safety regulations.

The instrument must not be operated in hazardous locations.

Before replacing the fuses, switch the instrument off and pull the power plug from the wall socket.

The instrument is de-energized when the power cable is disconnected from the power supply (power supply circuit breaker).

Do not use any fuses other than factory-installed fuses.

For corresponding fuse specifications see [Chapter 4.3 "Specifications"](#).

Hazards - safety regulations on the instrument itself



- Markings on the instrument showing the warning triangle indicate that the correct operating instructions (as defined in these Instructions for Use) must be followed when operating or replacing the item marked.
- Failure to adhere to these instructions may lead to accidents causing personal injury and/or damage to the instrument or accessories or destroyed, unusable specimens.

3.1 Unpacking instructions



When the instrument is delivered, check the packaging first. Check the shipment for possible damage and note this on the shipping documents if necessary.



Fig. 2



Fig. 3



Fig. 4

- Carefully cut through the adhesive tape at the indicated locations (Fig. 2).
- Remove the provided bag with documents (including the User Manual etc.) and replacement fuses.
- Then carefully take the control unit (Fig. 4) out of the packaging.
- Unpack the forceps (Fig. 4).
- Unpack the cable loom provided and select the cable for the country of use.

3. Installation

Necessary assembly work

Proceed as follows to make the instrument ready for use:

- Forceps holder **(1)** with paraffin collecting tray **(2)** is factory-installed on the right side. If it needs to be installed on the left hand side, follow these steps:
 - Loosen the four Phillips screws **(3)** on the bottom of the instrument.
 - Remove forceps holder / collecting tray, reverse it and fasten it to the opposite side (insert screws in corresponding holes on opposite side).

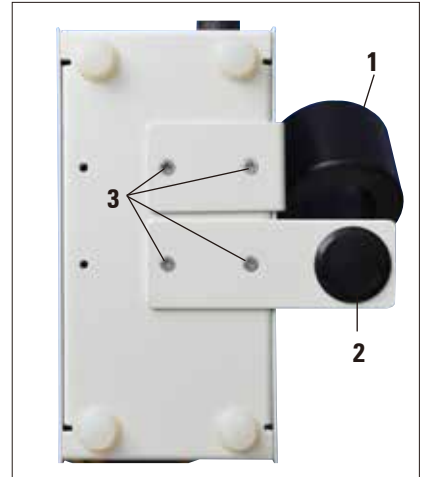


Fig. 5

3.2 Standard delivery

Base unit.....	14 0388 35824
• Control unit with voltage selector switch, 100-120/220-240 V/50-60 Hz	
• 1 screw-on tweezer holder for installation on the control unit	
• 1 screw-in heatable forceps with spiral cable	
• 1 set of fuses (2x T1.25 A L250 V)	
• 1 Instructions for Use printed (German/English, with Language CD 14 0388 83200).....	14 0388 83001

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.



Carefully check the delivery against the packing list, delivery note and your order.
Should there be any discrepancy, please contact the Leica sales unit handling your order or your Leica dealer.

3.3 Setting up the instrument/Site requirements



Do not operate the instrument in rooms with explosion hazard.
To ensure proper function of the instrument, it must be set up while maintaining a minimum distance of 10 cm from walls and furniture.

- The instrument requires an installation area of approx. 150 x 200 mm.
- The substrate must have a sufficient load capacity and rigidity with respect to the weight of the instrument.
- Relative humidity: 20 to 80 % - non-condensing.
- Room temperature consistently between +18 °C and +40 °C.
- Elevation: up to a max. 2000 m above sea level.
- The instrument is designed for indoor use only.
- Avoid vibrations, direct sunlight and heavy variation in temperature!
- The power supply must be within the range of the length of the power cable. No extension cable may be connected.
- The instrument **MUST** be connected to a grounded power socket.
Use only one of the provided power cables that is intended for the local power supply.

3. Installation

3.4 Electrical connection

The Leica EG F can be connected to different electrical power systems (voltage and frequency-dependent, refer to Chapter 4.3 "Technical data").

Please observe the following notes to prevent damage to the instrument:



**The instrument MUST be connected to a grounded mains socket.
Only the power cord intended for the local power supply (socket) may be used.
Do not use an extension cord!**

The instrument can be connected to the following voltages:

100 to 120 V and 220 to 240 V~, 50/60 Hz.

The instrument is factory-set to 220 to 240 V~ (**Fig. 6**). If the voltage needs to be changed, insert a screwdriver in the slot (3) and move the setting to the desired value.

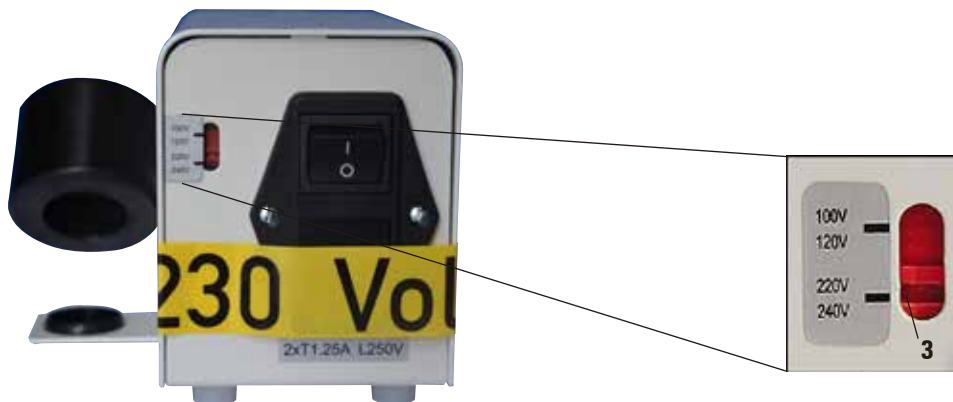


Fig. 6

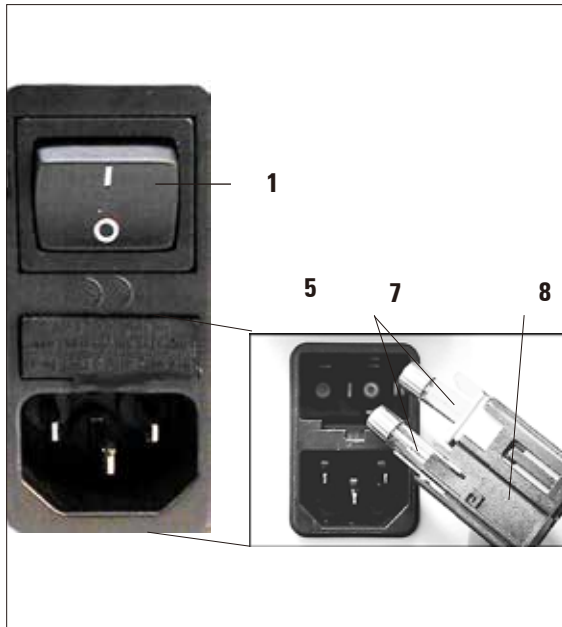


Fig. 7

Replacing fuses



Switch the instrument off and unplug it. Use only the supplied replacement fuses.

- Insert a small screwdriver into the cutout (5) and carefully pry out the insert.
- Remove the fuse housing (8) along with the fuses (7).
- Replace the defective fuses, reinsert the fuse housing in the instrument and press down until it snaps into place (with an audible click).

Connecting to mains



Before connecting the instrument to the mains, ensure that the voltage selector switch is set to the correct local voltage!

An incorrect setting of the voltage selector can cause serious damages to the instrument!

The instrument must be disconnected from mains before changing the voltage selection.

Connecting the power cord

- Before connecting the power cord, ensure that the mains switch (1) to Off = 0.
- From the cable set, select the power cable with the plug suitable for your power socket.



The instrument must be connected to mains only with the supplied power cord and only to a grounded socket.

- Connect the plug of the power cord to the connecting socket to the connection socket (6) on the rear of the control unit.
- Connect the plug of the power cord to the power socket.

4. Instrument Characteristics

4.1 Overview – instrument components/functions



Fig. 8

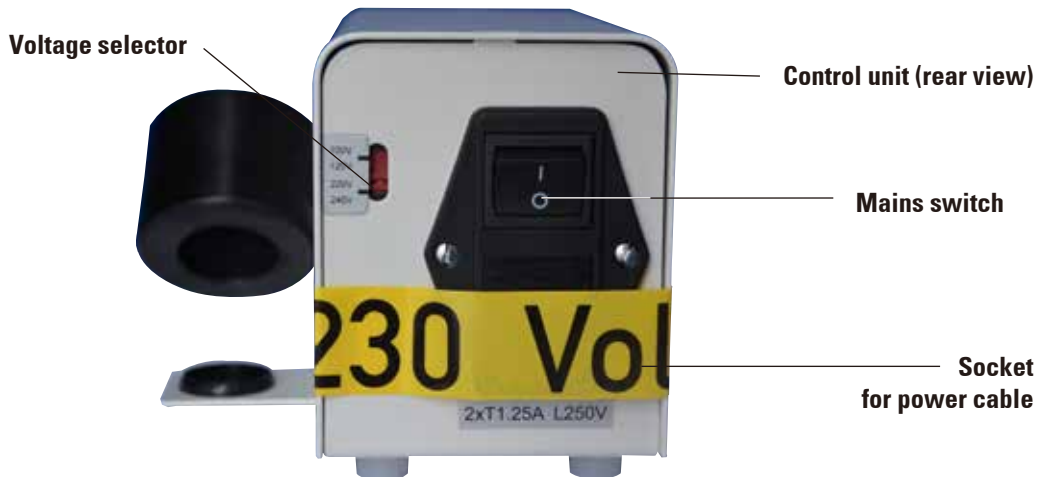


Fig. 9

4.2 Instrument components/functions



The control panel on the front side of the control unit consists of a membrane keypad with push buttons (2), a single-line display (1) and an LED (3) which flashes yellow during the warm-up phase. If the preselected operating temperature is reached, this indicator lights permanently, thereby signaling its readiness.

Temperature display



Two options are available for selecting the temperature display:

- Temperature in °C



- Temperature in °F



Changing the temperature unit

- Switch off mains switch of the control unit.
- Switch on the control unit **while holding the**   key pressed.

Changing the temperature

- Change the temperature value by pressing the  or  key.



Important!
The forceps holder will become hot. Risk of burning!

4. Instrument Characteristics

4.3 Specifications

General data

Approvals:	The instrument-specific approval marks are on the side of the instrument next to the type plate.
Nominal voltage (+/- 10 %):	100-120/220-240 V AC
Nominal frequency:	50/60 Hz
Power fuses:	2x T 1.25 A L250 V
Nominal power:	10.5 VA
Relative humidity:	20 to 80 %, non-condensing
Operating temperature range:	+18 °C to +40 °C
Adjustable temperature range:	+55 °C to 70 °C
Storage temperature range:	+5 °C to 50 °C
IEC 1010 classification:	Protection class 1 Pollution degree 2 Overvoltage category II
Operating elevation:	maximum of 2000 m above sea level
A-weighted noise level:	≤ 70 dB (A)
IP protection class (IEC 60529):	IP20
Ambient pressure:	From 740 hPa to 1100 hPa applicable

Dimensions and weight

Dimensions (WxHxD):	130x 110x 180 mm
Empty weight (unpacked):	approx. 1.5 kg

Programmable parameters in the display

Temperature ranges displayed in °C or °F



- **Before any maintenance, switch off the instrument and unplug it from power supply.**
- **To clean the exterior surfaces, use a mild and pH-neutral commercial household cleaner. You may NOT use: Alcohol, cleaning materials containing alcohol (glass cleaner!), abrasives, or solvents containing acetone or xylene! The lacquered surfaces and the control panel are not resistant to xylene or acetone!**
- **While working and during cleaning, no liquid may get into the interior of the instrument.**

6. Warranty and Service

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 warranty depends on the contents of the individual contract concluded, being regarded as binding only the warranty conditions of your local Leica sales unit or of the company from which you acquired the product.

Technical service information

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

Please provide the following information:

- 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.

Decommissioning and disposal

The instrument or parts of the instrument must be disposed of in compliance with the local laws.

7. Decontamination Certificate (Master)

Dear Customer,

Any product that is to be returned to Leica Biosystems or serviced on site, must be cleaned and decontaminated in the appropriate manner. Since it is not possible to decontaminate for prion diseases, such as CJD, BSE, CWD etc., equipment exposed to specimens containing prion diseases cannot be returned to Leica Biosystems for repair. On-site repair of prion contaminated equipment will only be conducted after the Field Service Engineer has been educated in the risks, instructed in the policies and procedures of the institution, and provided with personal protective equipment. Please fill out this confirmation carefully and enclose a copy with the instrument. Attach the confirmation to the outside of the flight case or hand it directly to the service technician.

Packages will not be opened, nor servicing commenced until the Company or service engineer have received a satisfactory certificate. Should returned goods be considered a hazard by the Company, they will be returned immediately to the customer at his/her expense. **Note:** Microtome knives must be in boxes. **Mandatory information:** Fields marked with * are mandatory. Depending on whether the instrument is contaminated, please also complete either section A or section B.

Nameplate information

Model (see nameplate)*

SN (see nameplate)*

REF (see nameplate)*

Tick Box A if applicable. Otherwise please complete all parts of B, providing further information as requested or appropriate.

A

Yes

This equipment has not been in contact with unfixed biological samples.

B

Yes

No

1 This equipment has been exposed internally or externally to hazardous materials as indicated below:

Please provide further detail here:

Blood, body fluids, pathological samples

Other biohazards

Chemicals/substances hazardous to health

Other hazards

Radioactivity

Yes

No

2 This equipment has been cleaned and decontaminated:

If yes, give details of the method:

Please provide further detail here:

If no**, please indicate why not:

** Such equipment must not be returned without the written agreement of Leica Biosystems.

Yes

No

3 The equipment has been prepared to ensure safe handling/transportation. Whenever possible, please use the original transportation case/box.

7. Decontamination Certificate (Master)

Important - to avoid refusal of shipment:

Place one copy in the unit prior to packaging, or hand it over to the service engineer. Customer assumes all responsibility for the immediate return shipment of articles sent to Leica without proper decontamination documentation.

If you have any further questions, please call your local Leica organization.

Leica Internal Use: If applicable, note corresponding Job and RAN-/RGA-Number:

Job Sheet No.: _____ BU Return Authorization Number: _____ SU Return Goods Authorization: _____

Signature/Date*

Name*

Position*

eMail

Institute*

Department*

Address*

Phone*

Fax

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