

HOMEX XS

User Guide



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1. Foreword

Thank you for purchasing our homogenizer HOMEX XS.

This manual for users describes the functional abilities and contains operation guidelines for the instrument. To use the instrument properly, please read this manual carefully before use. Keep it for later reference and troubleshooting.

1.1 Content check

Please check the instrument with the packing list (see chapter 6) when you first open the instrument's packaging. If you think there is something wrong with the instrument or something missing, please contact us immediately.

2. Safety warnings and guidelines



Important operation and safety information:

Read the manual before operation. Read the guidelines and directions below and carry out the necessary safety measures as described.



Safe Operating Procedures:

The operation, maintenance and repair of the instrument should comply with the basic usage guidelines and the warnings listed below. Failure to comply will have a negative effect on the life of the instrument and will result in an invalidation of the warranty.



This product is for indoor use only.



The operator should not open or repair the Instrument. Opening the instrument will result in a loss of warranty or may cause serious injury or death. If there is something wrong with the Instrument, only companies approved by the manufacturer should repair it.



The A.C. power's grounding should be sufficient stable. The 3-pin plug supplied with HOMEX's power cable is a safety device that should be matched with a suitable grounded socket.



Any liquid in contact with the machine will cause damage and provides a significant hazard.

The instrument should be placed in a dry, cool and dust free environment with no exposure to direct sunlight. Use only in a well-ventilated environment, with no corrosive gas or strong disturbing magnetic field, far away from central heating and other heat sources.



The main switch is on the rear of the device, push "I" to power on the device, and push "O" to power off the device. Switch off the instrument when you finish your work. Pull out the connector plug when there are long periods of no use. Cover the instrument with a cloth or paper to protect from dust.

Pull the connector plug from the back at once in the following case and contact the vendor:

- There is some liquid flowing into the Instrument.
- Drenched or fire burned.
- Abnormal operation: such as abnormal sound or smell.
- Instrument dropped or outer shell damaged.
- The function has obviously changed.

3. Maintenance of the instrument

Power off the instrument prior to cleaning and clean the homogeniser with a damp cloth. Corrosive cleaning reagents will damage the machine. Remove spills of extraction buffer immediately first with a soft cloth wetted with water, then wipe dry – in particular when buffer enters the ball-bearing head.

4. Introduction

The HOMEX XS is a rapid, automated system for the homogenization of tissues. The tissue is inserted into a BIOREBA extraction bag Universal 120 x 150 mm which contains an appropriate amount of extraction buffer. With the HOMEX XS the sample is homogenized and the filtered extract can then be used for analyses such as ELISA, PCR or other analytical applications.

The HOMEX XS homogenizes any kind of tissues without sharp edges. Some of the samples must be pretreated before extraction. Wood slices and thick samples need to be flattened with a rubber hammer. It is also recommended to crush fleshy tissues before extraction.

Up to 100 samples of the size from 0.1 g to 1 g can be processed per hour. The usual buffer volume used is 2 – 5 ml. A guidance for settings and times is given in the table in section 4.2.

4.1 Specifications

Sample volume	0.1 – 1 g
Buffer volume	2 – 5 ml
Extraction bags Universal (Art. No. 430100)	120 mm x 150 mm
Homogenization time range	5 – 60 seconds
Speed	500 rpm (labelled as 0 %) – 1'000 rpm (labelled as 100 %)
Overall dimensions	170 x 190 x 160 mm
Weight (without power supply)	3.7 kg

4.2 Standard time ranges and settings

Tissue	Time	Speed (max)	Sample volume
Leaves	10 – 25 sec	100 %	0.1 – 1 g
Soft sample with high protein content (e.g. beans)	10 – 25 sec	50 %	0.1 – 1 g
Fine roots (e. g. grapevine)	25 – 30 sec	100 %	0.1 – 1 g
Fleshy tissues; pretreated with rubber hammer (e.g. garlic, samples from potato tubers)	20 – 40 sec	100 %	0.1 – 1 g
Woody samples; pretreated with rubber hammer (e.g. grapevine wood slices)	40 – 45 sec	100 %	0.1 – 0.5 g

5. Operation guide

1. Plug the power supply into a socket and connect the HOMEX XS with the power supply cable at the rear of the machine.
2. Switch the HOMEX XS (switch at the rear) on.
3. Place a sample into an extraction bag and add the buffer. Do not exceed 5 ml.
4. Open the lid and slide the bag between the aluminum bars (6) (see Figure 2).
5. Close the lid and pull the handle (2) forward to secure the lid (see Figure 1). Do not tighten too hard.
6. Set the requested time with the potentiometer (3) on the left hand side and read the time on the display (4).
7. Set the requested speed with the potentiometer (5) on the right hand side from 0 – 100 %.
8. Start the homogenization by pressing the start button (1) on the left side of the machine.
The homogenization will start automatically and stop after the set time.
9. Push the handle (2) backwards, open the lid and remove the bag.
10. Proceed with the next sample.

Note:

- Do not run the machine without a bag inserted; the head might damage the lid.
- The machine will stop automatically when the lid is opened (from an angle of approx. 30°) during a homogenization process or if the start button is pressed a second time.

Figure 1: HOMEX XS front view



Figure 2 : HOMEX XS with open lid



- 1 Start/Stop button
- 2 Handle
- 3 Potentiometer to set the time
- 4 Display
- 5 Potentiometer to set the speed
- 6 Aluminium bars

6. Packing list

- HOMEX XS (Art. No. 400008)
- Power supply (Art. No. 400028)
- Cable to the power supply (Art. No. 400038)
- Transparent lid cover for HOMEX XS (Art. No. 400048)
- 25 Extraction bags Universal (Art. No. 430100)
- User guide

