



User Manual **TES Valida™**

Dispenser Unit



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and Publisher: Medite GmbH
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Germany

Read manual closely before putting device into operation • Keep manual accessible with device • Contact customer service in case of questions • Specifications subject to change without notice

MEDITE 

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1 Introduction

1.1 Manufacturer's Information on this Manual

By purchasing the product **Dispenser Unit – Tissue Embedding System TES Valida™**, you (in the following: customer) got a quality product of **Medite GmbH** (in the following: **Medite®**). This manual provides all information that is necessary for usage in a technical correct manner. The customer ensures to read the manual intently and to follow all applying advice to guarantee correct usage of the device.

All information stated in this manual is consistent with the current state of science and technique at the time of purchase of the device. **Medite®** is not committed to update the manual regularly. No subsequent delivery by default will be effected.

Details, sketches, technical drawings etc. concerning the actual product features may vary. The actual product features are specified within the terms of the purchase contract between **Medite®** and the customer.

The liability of **Medite®** for mistakes concerning details, sketches, technical drawings etc. stated in this manual is excluded within the frameworks of the respective national legal orders. This affects especially all financial losses and secondary failures that come about because or in regard of the stated information in this manual.

Medite® is certified according to the Quality Management Standard DIN EN ISO 9001 and has the aspiration of continuous improvement. On that account, **Medite®** reserves the right to change technical details and processes without prior notice.

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1.2 Important Information

1.2.1 About this Manual

This manual shall help you handling the device. Please read the manual completely and follow the advice. Acquaint yourself to the control elements and their functionality by studying the figures. This way, an adequate use of the device is ensured.

The device present is offered with two different power supply variations. Please check the tool identification plate to make sure that the device's power supply matches your local power supply. Different power supply variations mean no difference in handling and functionality of the device.

1.2.2 Used symbols and their meanings



Danger warning: Danger warnings are marked by a red framed triangle.



Warning: Warnings are marked with a yellow warning triangle.



Heat warning: Heat warnings identify parts and situations of the device with high temperatures.



Notice: Notices, meaning important information for the user, that are not classified as danger or warning, are marked with an information symbol.

Digits (1)

Digits in brackets refer to item numbers in figures.

1.3 Intended Use

The TES Valida™ is made for the purpose of embedding tissue specimens in histology, pathology and cytology laboratories. Processing of food is not permissible.

The conditions for operation, maintenance and service mentioned in this instruction manual have to be strictly observed.

1.4 Authorized Operators

The TES Valida™ must be used only by those persons who have been authorized by the owner. In his working area, the operator is responsible with regard to third persons. The owner must give the operator access to this instruction manual and make sure that the operator has read and understood its contents.

2 Safety



Any failure to comply with the approved technical regulations for the operation of technical equipment or any non-intended use of the instrument will void the manufacturer's liability.

2.1 Transport

When moving the TES Valida™ Dispenser Unit, please carefully consider the following directions for safety of the device and user.



This pictogram of arrows indicates which side is up on the packed device. Always move, handle and store so that the arrows point up. Rolling, folding, hard tilting as well as other forms of handling need to be avoided.



This pictogram indicates that the packed device is to be protected from moisture. It needs to be covered when stored and moved.

2.2 Installation

The TES Valida™ Dispenser Unit must be placed on an even and solid basis. A falling down instrument means danger of accident.



Unauthorized changes and technical modifications of the instruments are not permitted for safety reasons. For the exchange of defective parts, only original **Medite®** spare parts are to be used.



- Use the device only with the allowed power supply.
- Do not use the device in explosion-risk areas.
- Safety devices on device and accessories are not to be removed or modified.
- Do not place the device with its back directly to a wall. Arrange for a safety distance of minimum 10 cm.

2.3 Working with the TES Valida™ Dispenser Unit



When working with the TES Valida™ Dispenser Unit, take personal safety measures.



Caution! Parts of the Dispenser Unit can reach high temperatures.



When working with the TES Valida™, only use Paraffin without DMSO!

3 Components of the TES Valida™ Dispenser Unit

3.1 Front and Work Area



figure 3

- (1) Cold Light Lamp with switch
- (2) Connections for forceps (accessory)
- (3) Regulation screw
- (4) Exhaust valve
- (5) Digital display
- (6) Touch Screen Controller Elements

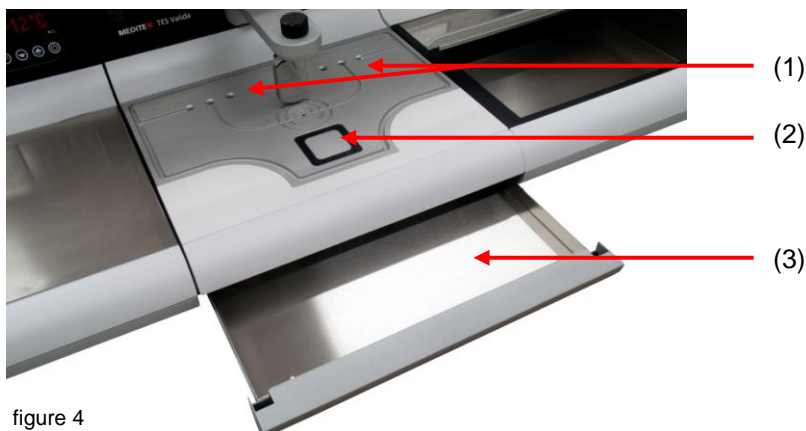


figure 4

- (1) Heating for forceps
- (2) Square cold spot
- (3) Collecting drawer



figure 5

3.2 Rear side



figure 6

- (1) Main switch (O – OFF / I – ON)
- (2) Connection socket for main cable with safety switch
- (3) Connection for forceps (accessories)
- (4) Connection for foot switch (included in delivery)

3.3 Technical Data



Please check the type plate for power supply and fuse! The values need to match your local conditions (power supply).

Dimensions (W/D/H) in mm

Dispenser Unit	360 x 600 x 340
Working Plate	300 x 270 x 48
Square Cold Spot	40mm Ø

Temperature

Paraffin Tank	30 °C – 70 °C
Working Plate	30 °C – 70 °C
Square Cold Spot	ca. -5 °C

Other

Weight	25 kg
Paraffin Tank Capacity	4.6 l
Forceps, Connections	Connection for two, Heating for six forceps
Protection Type	IP 20

Model 115V

Power Supply	115V / 60Hz / 450VA
Fuse	T6.3A

Model 230V

Power Supply	230V / 50Hz / 450VA
Fuse	T3.15A

3.4 Environmental Conditions

The acceptable environmental conditions for the use of the device are stated hereinafter. It is not permitted to use the device if the environmental conditions are different.

- Use the device in interiors
- Height above sea level up to 2000 m
- Environmental temperature between 5 °C and 40 °C
- Maximum relative humidity 80% at temperatures of up to 31 °C, linear decreasing down to 50% relative humidity at 40 °C
- Contamination level 2
- Overvoltage category II

Regarding storage of the device, environmental temperatures from 5 °C to 50 °C are permitted.

3.5 Scope of Delivery

The standard scope of delivery contains

- one device
- one power cord
- one foot switch
- one instruction manual.

3.6 Optional Accessories

For the TES Valida™ Dispenser Unit, the following accessories are available:

Glass magnifier, 4 diopters

Cat. No. 46-0088-01

Heated Forceps, 1 mm

Cat. No. 43-0011-00

Heated Forceps, 2 mm

Cat. No. 43-0012-00

Heated Forceps, 4 mm

Cat. No. 43-0014-00

4 Transport and Installation

4.1 Transport and Unpacking

The TES Valida™ Dispenser Unit is delivered in a safety board. Move it only vertical and avoid galvanic movements.

Place the device on a stable, smooth surface and remove safety board and protection film. Keep the packing materials stored in case of a later transport.

Check the delivery for correctness and completeness. In case of missing or wrong equipment, please contact your **Medite®** Sales Person.

4.2 Installation

Before starting the instrument, please make sure that your mains voltage corresponds to the value indicated on the instrument.

The instrument is supplied ready to use. For connection to mains the included power cord for heating instruments must be used. It must be connected to a socket with intact ground wire.



The minimum distance of the instrument back to the wall or other instruments should be at least 10 cm to guarantee a sufficient ventilation.
Do not place any inflammable or combustible material near the instrument.

5 Operation

5.1 Switching the unit on

Press the mains switch at the rear of the instrument. The unit is now in standby mode, which is indicated by the word OFF in the display.

Press the Power Key (figure 7 (8)) at the controller to activate the Dispenser Unit. The unit is now in default, where it shows the current temperature settings of both circuits. The temperature of the paraffin tank is indicated by an upward arrow, while a downwards arrow indicates the temperatures of the working plate. Ten seconds after last use, the unit always switches back to the default.

5.2 Switching the unit off

Press the Power Key (figure 7 (8)) at the temperature controller to deactivate the dispenser unit. The device is now in Stand-by, which can be recognized by the word OFF shown in the display.

For complete turn-off, use the main switch on the rear of the device, and put it in position "O".

If you wish to disconnect the device completely from power supply, please remove the mains plug from the safety socket.

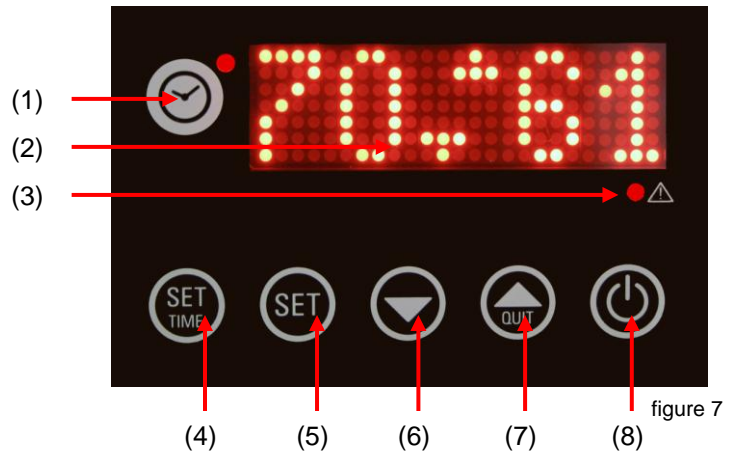
5.3 Temperature Circuits

The dispenser unit has two circuits that are shown in the display. The digits on the left of the display with the downwards arrow indicate the temperature of the working plate. The digits on the right of the display with the upwards arrow indicate the temperature of the paraffin tank. To choose one circuit, use the applicable direction key.

5.4 Temperature controller elements

The temperature controller consists of eight elements.

- (1) Clock Key with Light
- (2) Digital Display
- (3) Heat Warning Light
- (4) Set Time Key
- (5) Setting Key
- (6) Down Key
- (7) Up Key
- (8) Power Key



Before choosing the settings, select the desired circuit (see **5.4.6 Down Key**)



There is a beep when you press a key. This beep does not indicate a successful operation. Pay attention to the time designations for each feature.

5.4.1 Clock Key with Light

Pressing this key switches the display to real time, again pressing toggles it to the power-on state of the timer. After ten seconds, the display switches back to default. The power-on state of the timer is basically for both circuits. If the key is pressed for more than two seconds, the input screen for real time opens up and the display starts blinking. Another keypress closes the real time input mask and opens the week day input mask.

The light on top right of the key shines when the timer is active.

5.4.2 Digital Display

The digital display shows up to five red digits. Temperature is always shown in Celsius scale.

5.4.3 Heat Warning Light

The red heat warning light is positioned right under the digital display. It starts shining when the temperature of the surface is above 45 °C.



Be careful when the warning light shines. Surface is 45 °C or more. Serious risk of burning!

5.4.4 Set Time Key

Pressing this key switches the display to the first circuit time and opens the input mask for the weekly circuit times.

5.4.5 Set Key

This key is for calling up the temperature index values. The called up index value blinks and can be set with the up or down key.

5.4.6 Down Key

When in default, the down key is used to select the working plate to change its settings. In case of a running timer, the elapse time is displayed. In any setting mode, the key is for reducing the values.

5.4.7 Up Key

When in default, the up key is used to select the paraffin tank to change its settings. In case of a running timer, the elapse time is displayed. In any setting mode, the key is for reducing the values.

5.4.8 Power Key

To turn one circuit off, select it by pressing the up or down key while in default. Then press the power key for one second. The circuit is turned off, and the display goes back to default. There, it shows the remaining active circuit's temperature, and *Off* for the deactivated circuit.

To turn a circuit on, select it by pressing the up or down key while in default. Then press the power key for one second. The circuit is turned on, and the display goes back to default. There, it shows the remaining active circuits' temperature.

Each circuit has to be turned off separately. When both circuits are off, pressing the power button will turn on both again at the same time.

To avoid unintended deactivation, both turning on and turning off require pressing the key 1 second. one turned off. If both circuits are deactivated, default shows only one *Off* for both circuits.

5.5 Time settings

5.5.1 Set Real Time

To set the weekly timings, the real time must be set first. If it is not set, the display shows the marquee *Set clock*.

Press the Clock Key (figure 7 (1)) for two seconds. The display then shows a blinking time. Blinking means, that the shown value can be edited. The blinking will stop once you start the setting in order to avoid irritations. Use the direction keys to set the time. Press the Clock Key again when the setting of the current time is done. The display then shows the blinking word *Day* with a code number between 1 and 7. This number stands for the current week day. Choose the current week day by using the direction keys, and confirm the input by pressing the Clock Key again.

Current Week Day	Code
Monday	1
Tuesday	2
Wednesday	3
Thursday	4
Friday	5
Saturday	6
Sunday	7

If the setting is not confirmed or processed for ten seconds, the process is cancelled.

When the power supply is off for a considerable time, it is possible that the real time gets lost.

5.5.2 Set Weekly Timer

With the weekly timer, automatic start and end times can be preset in 24 hours mode. Choose the desired circuit by using the direction keys when in default.

Press the Set Time Key for two seconds. The display then shows a figure (1 – 7, see Chapter **5.4.1 Set Real Time**), an I and a four-digit time indication with a colon in the middle. The I stands for Activate, and the time indication is the starting time.

Read “1 I 10:15” as “On Monday, timer starts at 10:15 a.m.”.

Press Set Time Key again and then use the direction keys to set the starting time. When you're done, press Set Time to save your input. You'll get back to the display showing the preset time. With the direction keys, you can switch from this display to any week day and set start and end times. Setting the ending time is the same procedure.

Read “1 0 20:15” as “On Monday, timer ends at 8:15 p.m.”.

When setting the starting time, between 23:59 and 00:00 there is a stopover "--:--". When this is chosen, the unit will stay inactive for that day. Hence, no ending time for that day needs to be set, so the setting jumps to the next day.

When the Weekly Timer is active, the power key can still be used any time for turning a running circuit off or on. Therefore, select the desired circuit with the direction keys. Note that in case of both circuits deactivated, pressing the power key will turn on again both.

Only the current circuit is affected. Subsequent preset operations are not affected.

6 Failure, Errors and other Problems

6.1 Change of Fuses

In case of failure of the device, check the fuses in the fuse holder, which is integrated in the instrument socket at the rear. Proceed as follows:

- Pull out the mains plug
- Open fuse holder with a screw driver
- Change the fuse (only use original **Medite®** material)
- Close the fuse holder
- Connect to mains and try again

(1) Notch
(2) Fuse drawer
(3) Fuses

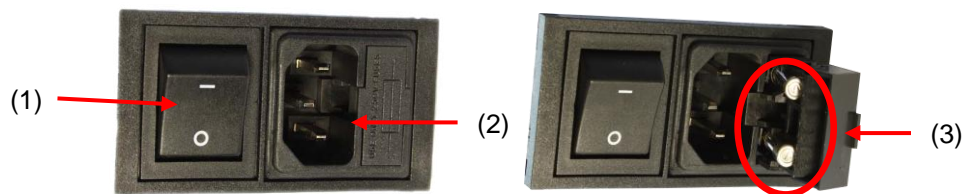


figure 8

In case of any other defect, or if the described procedure is not successful, contact the **Medite®** Service Department.



First pull out the mains plug!
It is only permitted to use UL accredited fuses, that are available at **Medite®**!

6.2 Error messages

Indicated Message	Cause	Solution
F1L, blinking	Sensor error; short circuit	Call Service Engineer
F1H, blinking	Sensor error; broken sensor	Call Service Engineer
F2L, blinking	Sensor error; short circuit	Call Service Engineer
F2H, blinking	Sensor error; broken sensor	Call Service Engineer
EP, blinking	Lost data in parameter memory	Call Service Engineer
Set Clock, continuous	Lost real time	Set real time (see 5.4.1)



Only **Medite®** authorized service engineers are allowed to correct the correspondingly marked errors. Do not try it yourself!



Never remove any parts of the casing while the instrument is on power.

7 Cleaning, Maintenance and Recycling

7.1 Cleaning

The surfaces of the TES Valida™ and its Dispenser Unit can be cleaned with commercial, non scratching detergents. For safety reasons, the mains plug must be pulled before cleaning the instrument. Furthermore, working at the instrument is only allowed after cooling down of its heated parts (danger of burning!). Clean the instrument after every use to ensure long, trouble-free usage.

7.2 Maintenance

Maintenance of the instrument includes the cleaning of the ventilation slots to make sure that the chamber is continuously ventilated, and to prohibit overheating. We recommend maintenance at least once a year.

For safety reasons, the mains plug must be pulled before doing maintenance work at the instrument. Furthermore, working at the instrument is only allowed after cooling down of its heated parts (danger of burning!).

7.3 Recycling

At the end of operating life of the TES Valida™ Dispenser Unit, please arrange proper recycling. **Medite®** is prepared to arrange such proper recycling against payment for the disposal fee.



Do not expose the instrument to regular domestic or industry waste. It contains electrical parts that can be dangerous to the environment!

8 Care Declaration

We are always extremely anxious for the safety of our customers and users of our products. Our products need regular care and cleaning. To ensure long and good operating with our products, we ask our customers for careful handling of the purchased equipment.

By purchasing the equipment, the customer assures to keep the device always in good order and condition for use, to protect himself or third parties against any unnecessary risk.

In case of maintenance or repair, we kindly ask the customer to make sure that the device and the accessories in question are in a state that bears no health risks for every person that gets in touch with it in the process. This includes everyone who prepares the device for dispatch, performs the dispatch, or takes and unpacks the delivery, and also the **Medite®** service staff. The customer arranges for appropriate measures in packing, or for explaining messages concerning the known sources of danger.

We assume sanitary cleanness.

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