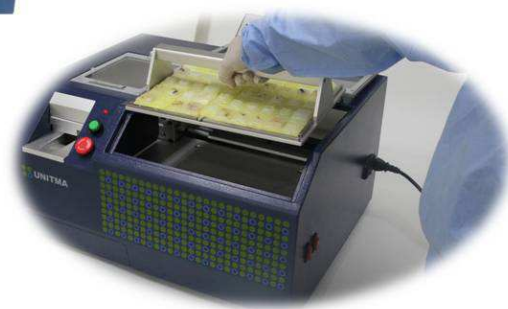


# Paraffin Block Trimmer

## Quick Trim-UPBT-1011



**Note**

This User Guide describes the installation and operation of Paraffin Block Trimmer (UPBT-1011)

Read and review this manual to avoid injury and prevent damage to this instrument or any products connected to it before you operate to avoid potential hazards, use this instrument only as specified in this manual.

This manual contains information and warnings that must be followed by the user to ensure safe operation and to maintain the instrument in a safe condition.

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**All information is subject to change without prior notice.**

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## 1. COMPONENTS AND SPECIFICATIONS

### 1.1 Outline

The instrument is a Paraffin Block Trimmer which removes paraffin residue on the sides of the paraffin block safer embedding process for the histopathological research.

The instrument was invented to save the time and labor for users who uses conventional tools like razors to remove paraffin residue around the paraffin blocks. In addition, the instrument offers the safe users' environment than ever.

Paraffin Block Trimmer UPBT-1011 mainly consists of 3 mechanical modules.

1) Module carrying the blocks

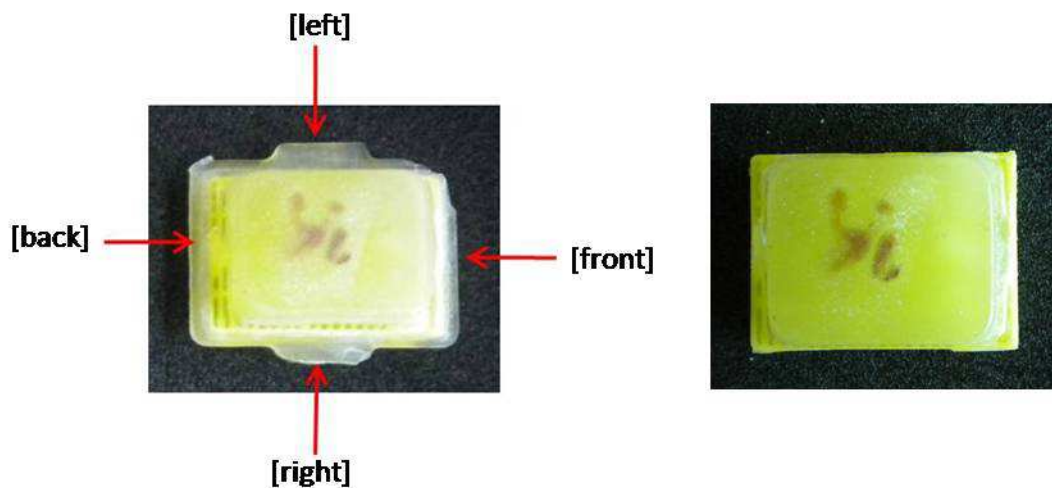
① Module to move the blocks for trimming

② Movement backward/forward to trim the right/left side of the block ('Y' direction) (▲) and movement to the right/left to trim the front and back side of the blocks ('X' direction) (▶)

2) Module to trim

① Module to trim the paraffin residues around the blocks

② Two trimming modules remove the paraffin residues on the 4 sides of the blocks by two steps

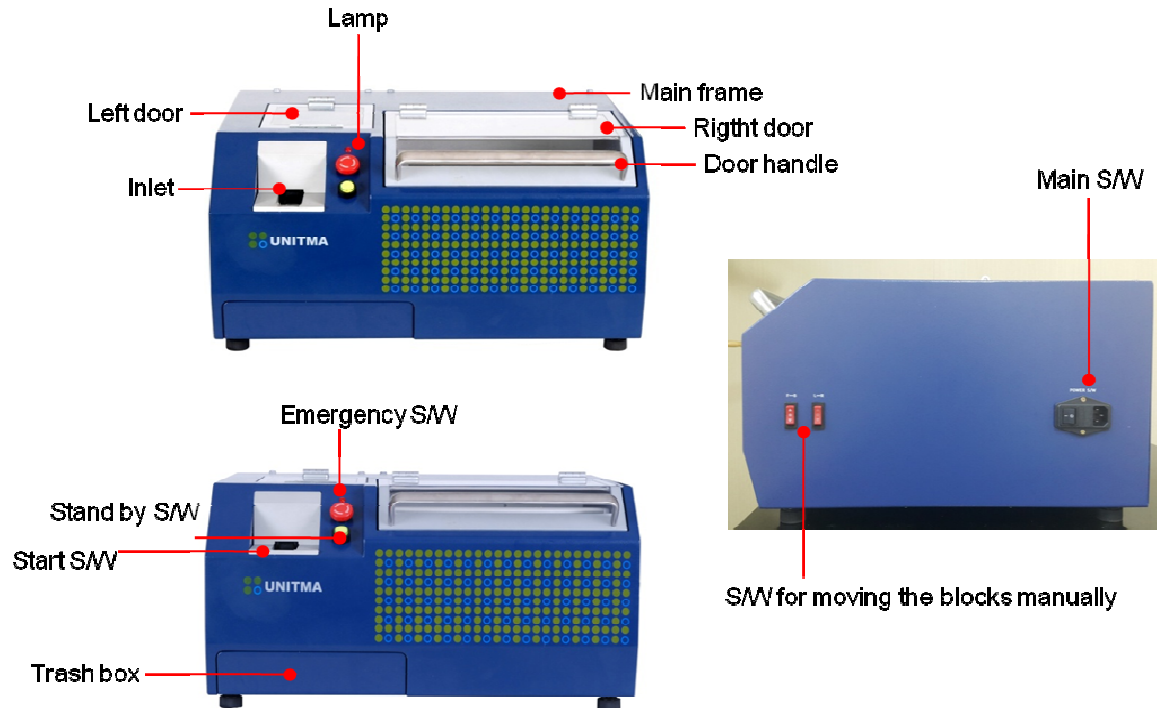


<Paraffin Block before trimming><Paraffin Block after trimming>

3) Array plate

Trimmed 50 blocks are placed by 10 blocks x 5 lines on the array plate in order

1.2 Instrument exterior



1.3 S/W and Lamp

Button	Function
Main S/W	Power ON/OFF
Lamp	When power S/W On, the front lamp turn Red
Stand by S/W	This button is for the use of the instrument when the power is on. The 'Green' light is on when the switch is pressed
Start S/W	This button is for the use of the instrument when the power is on. The 'Green' light is on when the switch is pressed.
Emergency S/W	Press the button on Emergency and turn it clockwise to release the Emergency situation.
S/W for moving the blocks manually	In order to remove the stuck blocks in the trimming module, a user can remove the blocks by using the S/W on the right side of the instrument after pressing the Emergency button. To move Forward/backward with using the switch (F-B) and to move to Left/Right with using switch (L-R).

## 1.4 Instrument Specifications and Features

Model name	UPBT-1011
Nominal Power supply voltages	110VAC / 220 VAC
Nominal frequency	50 / 60 Hz
Net weight	47 kg
Max Size (W x D x H)	580 x 477 x 280mm
Trimming capacity	Max. 750 blocks per one hour
Humidity during transportation/storage	Max. 80% non-condensing
Operation environment	Indoor use only
Main voltage fluctuation	Up to $\pm 10\%$
Certification / Approval	ISO / CE / FCC

## 2. Installation

### 2.1 Site requirements

#### •Transporting the instrument

Before you install the instrument, ensure that your site is properly prepared so you can avoid having to move the instrument later to accommodate with a power source.

#### •To transport the instrument safely, take the following steps:

- 1) Since the weight of the instrument is about 50kgs, two adults are necessary for safe transportation.
- 2) Minimum 2 people working together should hold each side of the instrument.
- 3) Be careful during moving the instrument to avoid any physical damage.

#### •Floor requirement

- 1) Ensure that the floor under the instrument is capable of supporting all other installed instrument.
- 2) The weight of the instrument is about 50kgs. Do not put any objects on the instrument or accessories.

#### •Positioning the instrument

- 1) The rear side of the instrument must remain unobstructed to ensure adequate airflow and prevent overheating inside the instrument. Refer to the next instruction of 'Ventilation requirement'.
- 2) The power inlet in the right side of the instrument is for connecting the power cable to AC power source. Ensure that connecting cable is not obstructed.

## 2.2 Connection to main power



- A constant and stable AC power source supply to the instrument must be ensured at all times. Failure to comply with this will cause severe damage to the instrument.
- Always use a grounded power cord. Do not use defective power cord.

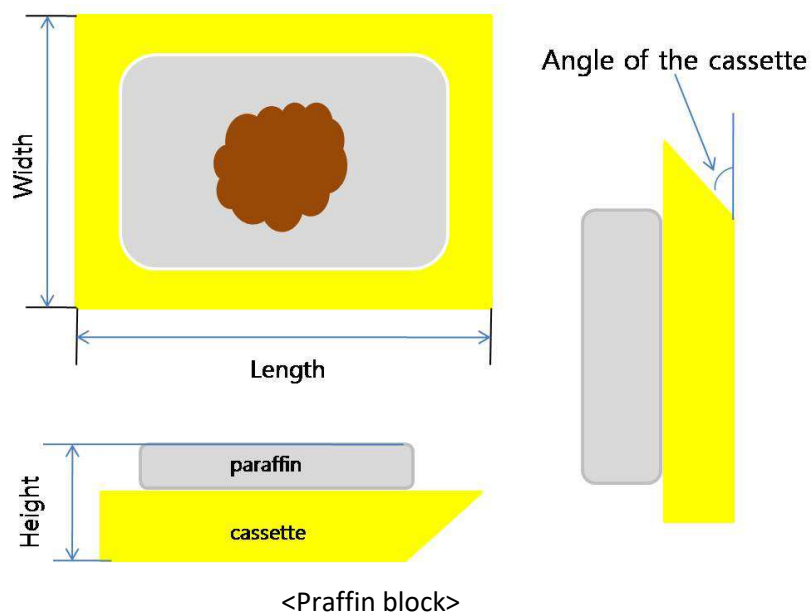
- 1) Set the AC power switch to the 'OFF' position.
- 2) Connect the power cord (maximum 3m) to the right of the instrument, then to a suitable AC voltage source. Ensure that you have the correct line cord.

## 3. OPERATION

### 3.1 Applicable paraffin blocks and cassettes

This instrument is applicable for trimming the below dimensions of the paraffin blocks.

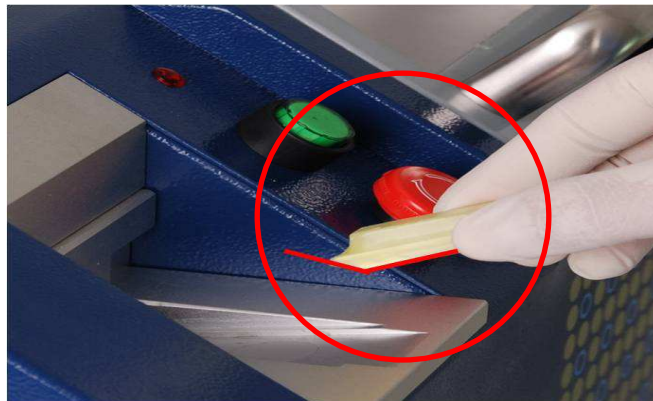
- Cassette Width: 28mm  $\pm$  0.5mm
- Cassette Length: 40mm  $\pm$  0.5mm
- Angle of the front bevel of plastic cassette: 30° ~ 45°
- Total height of the blocks: under 15mm



### 3.2 How to input the blocks into the trimmer (Very important note)

Please make sure of input the blocks with the front bevel toward the inlet.

Otherwise, the instrument will stop till the block is input by the front bevel toward the inlet or the input block will move into the instrument and stuck in the trimming module.



<Direction of the blocks to put into the inlet>

In case of putting the blocks to the wrong direction like the below picture, please follow the steps.

1. In case the sensor fails in detecting the blocks input to the wrong direction and the instrument does not run,

- 1) A user should press Emergency S/W at once and open the upper door,
- 2) And push the input block out of the inlet by hand.
- 3) Then, turn the Emergency S/W clockwise to release the Emergency situation
- 4) And press Start button to continue trimming

2. In case a block is input to the wrong direction or the input block is stuck in the trimming area, Please follow the below steps:

- 1) The user should press Emergency S/W at once and open the upper door,
- 2) And take out the stuck block by a hand after the block carrier returns to the original point by using [F-B] switch for moving forward and backward direction or [L-R] switch for moving to the left/right direction located on the right side of the instrument.
- 3) Then, turn the Emergency S/W clockwise to release the Emergency situation.
- 4) And press Start button to continue trimming.



The stuck block may be broken in the trimming module WHEN the block was input to the wrong direction into the inlet, so please make sure of putting the blocks with the front bevel toward to the inlet.



< Wrong way to put the block into the inlet >

### 3.3 How to operate

- 1) Check the size of the blocks applicable to the instrument
- 2) Prepare for the blocks in order
- 3) Check the instrument inside out and clear
- 4) Place an array plate after opening the upper door and close the door.
- 5) Power switch 'On' and then the front lamp turn to 'Red'.
- 6) Press Green button to start
- 7) Put the blocks on the inclined way with the front bevel of the block toward the inlet, and push the block into the inlet, and press the block slightly for a second, then the block will move into the instrument.

Step1.



Step2.



Step3.

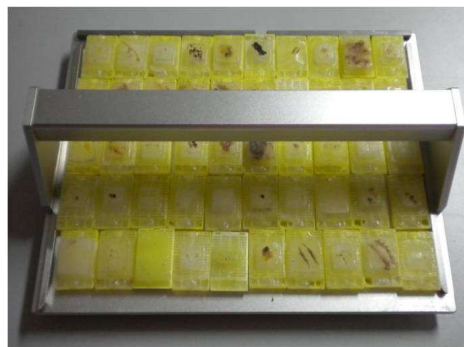


8) When paraffin blocks are precisely placed on the block tray, press the 'Start' button located at the left side of slot (red button). Then the loaded blocks are transferred to the rear area of the instrument for the trimming procedure.

9) The block will move into the trimming module to trim the right and left side of the block first, Then, move to the right to trim the other two sides.

10) The trimmed block will come out from the trimming module and laid by 10 blocks and arrayed block x 5 lines (50 block) on the plate.

11) Then, the alarm sounds 3 times



<Trimmed blocks>

- 12) After the alarm sounds, please stop inputting the blocks and open the upper door
- 13) Take out the array plate to replace it with a new array plate to continue trimming.
- 14) Turn off the power switch when the work is finished completely.
- 15) After the trimming, a user need to clear the paraffin debris in the trash box and around the trimming module with opening the upper doors.

### 3.4 Emergency situation

In case of Emergency situation, press Emergency switch to stop the instrument instantly, and turn It clockwise to release the emergency situation. If a user wants to start again, press the start button.

## 4. Cleaning & Maintenance

### 4.1 Cleaning the instrument after operation



- For safety reasons, unplug the AC power cord from the electrical outlet before cleaning.
- Do not allow liquid or small particles to get into the instrument or accessories when cleaning.

- Wipe out debris trimming modules and the array plate with a brush and soft cloth.
- Recommend to use a vacuum cleaner to remove paraffin debris if available.

### 4.2 Maintenance

We recommend the users to check the followings

Check	Action
Exterior & Interior	<ul style="list-style-type: none"> <li>• Clean as per the instruction</li> </ul>
Labels	<ul style="list-style-type: none"> <li>• Check for readability or missing labels.</li> </ul>
AC cord	<ul style="list-style-type: none"> <li>• Check the cord and molded connectors for damage.</li> </ul>
Feet	<ul style="list-style-type: none"> <li>• Check for presence of all four feet.</li> <li>• Check feet for physical damages or deterioration.</li> </ul>
Power cord receptacle	<ul style="list-style-type: none"> <li>• Make sure receptacle is free of foreign matter</li> <li>• Check for presence of all 3 connector pins and make sure they are straight.</li> </ul>

### 4.3 Replacing the fuse



- Use only a fuse of the same specification. Refer to the fuse specification in the guide.
- Unplug the AC power cord. Removing or touching the fuse with the AC power cord plugged may expose you to hazardous voltages and cause severe damages.

- 1) Locate the fuse holder module. It is located as part of the power cord assembly on the left side of the instrument.
- 2) Remove the old fuse by gently pulling it out.

## 5. WARRANTY & SERVICE



- Contact UNITMA for repairing services, replacement of components and additional consumables.

UNITMA Co., Ltd. offers the limited warranty for the Paraffin Block Trimmer against defects in material and workmanship under normal use and service for period of 1 year from the date of purchase.

### 5.1 Warranty

- 1) UNITMA will either repair the Paraffin Block Trimmer (with new parts) or replace it with a new unit during the warranty period provided it is returned in accordance with the term of the warranty. Replaced new parts are warranted for the balance of the original applicable warranty period. Replaced defect parts of the product shall become the property of UNITMA.
- 2) This limited warranty is provided by UNITMA to the original end-user purchaser and is not assignable or transferable to any other third party.
- 3) UNITMA cannot be responsible in any way for any additional equipment not furnished by UNITMA which has been attached to or used in connection with the product.
- 4) Customer must provide a proof of purchase (bearing the date of purchase and the product's serial number) in order to receive the warranty service. Warranty service will be provided by UNITMA through one of its authorized warranty service centers.

## **5.2 Disclaimer**

- 1) Defects or damage resulting from the use of the product other than its normal customary usage.
- 2) Defects or damage from misuse such as breakage, spillage or liquid or substances that can cause circuit-shortcut of the electronic boards and battery leakage, etc.
- 3) Defects or damage from improper testing, operation, installation, alteration, modification or adjustment of the instrument.
- 4) Breakage or damage unless caused directly by the defects in material and workmanship.
- 5) A product with unauthorized modification, disassembling, and/or repair which adversely affect the performance.
- 6) A product with serial number and/or the warranty seal removed or made ineligible.
- 7) Scratches or other cosmetic damage to the product that do not affect the operation.
- 8) Normal and customary wear and tear.
- 9) Force Majeure: any damage beyond the reasonable control of UNITMA such as but not limited to: Fire, Flood, Earthquake, act of Terrorism, etc.
- 10) Shipping costs for pick-up and delivery from user's facility.

## **5.3 Contact for technical service**

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