

# Digital Tissue Section Bath

Like the LED Tissue Section Bath (page 11), the digital model incorporates an innovative digital control that accurately maintains water temperature and allows tissue sections to be efficiently flattened prior to being picked up with a microscope slide. It also incorporates an extra deep 90mm bowl to allow slides to be fully dipped at an angle without touching the bottom.

A generous space surrounds the bowl to allow users to rest their hands when floating sections.

Enhanced safety features include recessed controls, an over-temperature thermal cut out and miniature circuit breakers.

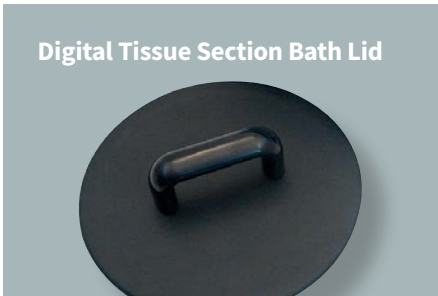
Dimensions: 370mm x 295mm x 135mm (D x W x H). Bowl Depth: 90mm

Item Code	Description	Quantity
JAW-0300-00A	Digital Tissue Section Bath (110-230V A.C. 50-60Hz)	1
JAW-0300-00L	Digital Tissue Section Bath Lid (Round)	1



## KEY BENEFITS

- 1 Deep bowl with large diameter allows slides to be used at any angle to pick up section
- 2 Convenient slide drying area at rear of the bath
- 3 Small footprint ensures minimal work bench space is taken up
- 4 Ultra-fast heating system reduces waiting time before instrument is ready for use
- 5 Enhanced safety features
- 6 Anti-bacterial powder coating finish inhibiting growth of bacteria and viruses
- 7 Digital temperature control accurate to + or - 0.5°C at 45°C
- 8 Incorporated miniature circuit breakers eliminating the need for replacement fuses
- 9 Optional easy to use drop-on lid improves heating efficiency and control, whilst protecting water from contamination



Digital Tissue Section Bath Lid

FOR INFORMATION  
ON SLIDE DRYING  
WORKSTATION  
SEE PAGE 13

# Digital Tissue Section Bath with Slide Drying Workstation

Item Code	Description	Quantity
JAW-9900-00B	Digital Tissue Section Bath with Slide Drying Workstation	1



# Digital Tissue Section Bath

## User Manual



## Digital Tissue Section Bath

Thank you for purchasing this piece of CellTec laboratory equipment.  
To get the best performance from your equipment and for your own safety  
please read these instructions carefully before use.

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## General Notes

- 1 This product is designed for laboratory use only. Always follow good laboratory practice.
- 2 If this product is not used in accordance with these instructions then basic safety protection may be affected.
- 3 If damaged or in case of failure the power supply unit supplied with this product should be replaced with an equivalent power supply unit.
- 4 Before using any cleaning or decontamination method please refer to the Maintenance and Cleaning section to ensure the proposed method will not damage the unit.
- 5 Connect only to a power supply with the corresponding voltage to that specified on the rating label positioned on the rear of the unit.
- 6 Ensure that the power supply has an earth (*ground*) terminal.

## Symbols



This symbol appears in documents and on equipment to warn the user that there are hot surfaces on the equipment.



This symbol appears in documents and on equipment to warn the user that instructions must be followed to ensure correct or safe operation.

## Specimen Safety

It is the user's responsibility to ensure that the temperature set on the instrument is at a level where no damage is caused to diagnostic specimens used with the equipment. In the event of this instrument malfunctioning, all specimens within the device should be checked to ensure no harm or damage to the specimen has been caused.

## Amendments

Issue 5: May 2021

## User Safety

The equipment you have purchased complies with the following European Directives EMC Directive 2014/30/EU Electromagnetic Compatibility and Low Voltage Directive 2014/35/EU as indicated in the EC Declaration of Conformity included in the document. This instrument has been designed and constructed in a manner which minimises the risk of electrical shock to the operator, offers maximum protection from overheating and provides clear and adequate labelling of instrument controls. The instrument requires no regular servicing, but CellPath Ltd do recommend an annual inspection, as detailed in the manual which will prolong the life of the instrument to ensure continued safety.



**Do not touch any electrical contacts or open any closure plates. RISK OF ELECTRIC SHOCK!!**

### DO NOT:

- 1** Use for heating organic or corrosive fluids.
- 2** Operate without water in the bowl.
- 3** Use metal instruments or scouring agents to clean the bowl.
- 4** Over or under-fill the section bath. The recommended water level to be within 25mm of the bottom of the bowl and 10mm from the top of the bowl.
- 5** Pour water away from the control panel.
- 6** Do not immerse in water.

### DO:

- 1** Position the unit so it can be disconnected from the power supply with ease.

## Power Lead and Connection to Electrical Supply



**Check the electrical supply is compatible with the rating label. IF IN DOUBT CONSULT AN ELECTRICIAN. THE PRODUCT MUST BE EARTHED!**

**Where the mains supply or plug connection differs refer to local regulations or consult an electrician.**

## Specification

The CellTec Digital Tissue Section Bath is designed with both reliability and ease of use in mind. Digital temperature control accurately maintains water at a set temperature, which enables tissue sections to be efficiently flattened prior to being picked up with a microscope slide.

The bath has generous space for a user to rest their hands when floating sections and an extra deep tapered bowl which allows slides to be dipped at any angle, without touching the bottom of the bowl. Stability is provided by four rubber feet and controls have been recessed to provide the user with an added measure of safety. The bath also features additional safety features such as an over temperature cut out and miniature circuit breakers.

**Dimensions:** Width 295mm  
Depth 370mm  
Height 135mm

**Bowl:** Diameter 220mm  
Height 90mm

**Weight:** 4.5Kg

**Temperature Range:** 30°C to 75°C

**Display:** +/- 1°C accuracy

**Power Supply:** 110V/230V a.c. 50-60Hz

**Safety:** Class 1 cut out

**Heater Power:** 400 watts

## Environment

This instrument is required to comply with the European Union's Waste Electrical and Electronic Instrument (WEEE)

Directive 2012/19/EU.

It is marked with the following symbol:



This product should be returned to CellPath Ltd for disposal and recycling.

## Location

The product must be placed on a smooth, level and sturdy work surface. Suitable for use in ambient temperatures 5°C to 40°C with a maximum humidity 80% (temperature 31°C) decreasing to 50% (temperature 40°C).

## Operating Instructions

- 1 Fill the bowl of the Digital Tissue Section Bath with distilled water. The recommended water level to be within 25mm of the bottom of the bowl and 10mm from the top of the bowl.

**! DO NOT ALLOW THE BATH TO RUN DRY.**

- 2 Connect the mains plug to the electrical supply and switch on. (*Ensure the power supply is properly earthed*).
- 3 Turn on the water bath.
- 4 Select the desired temperature.



A. Press button **P** then release it (*do not hold down button P for 5 seconds*).

B. The display will show **SP** alternating with the current set temperature.

C. To change the set temperature press the **UP** key to increase the value or **DOWN** to decrease it. These keys increase or decrease the value one digit at a time, but if the button is pressed for more than one second the value increases/decreases rapidly, and after two seconds pressed, the speed increases even more to allow the desired values to be reached rapidly.

D. Exiting the Set mode is achieved by pressing the **P** key or automatically if no key is pressed for 15 seconds. After that time the display returns to the normal function mode.

- 5 The heater indicator will illuminate to show heater activity.
- 6 The instrument will then warm up to the desired temperature, you will observe the temperature rise on the display.
- 7 The instrument is designed to warm up and reach working temperature within 30 minutes. The instrument will maintain the set working temperature at +/- °C, by alternating heating and cooling.

## Cleaning Instructions

- 1 The lower case work of the Digital Tissue Section Bath, including the control panel, may be wiped using small quantities of mild detergent or polishes applied with a soft cloth.
- 2 The bowl should be emptied and refilled with clean distilled water at the end of each working day.
- 3 The bowl will require cleaning at regular intervals, using a minimal quantity of mild detergent applied with a soft cloth and then allowed to dry.

**! SCOURING PADS OR DE-SCALING AGENTS MUST NOT BE USED TO CLEAN THIS INSTRUMENT.**

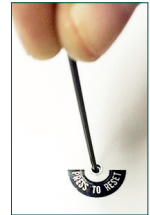
## Miniature Circuit Breakers

Located on the rear of the bath. In the event of a fault, push back in to reset. If fault situation continues, please contact your Service Engineer or CellPath Ltd.

## Latching Safety Cut Out

**! DISCONNECT FROM ELECTRICAL SUPPLY BEFORE CONTINUING. ALWAYS INVESTIGATE THE CAUSE REASON FOR SAFETY DEVICE OPERATION.**

Located on the underside of the unit is a small hole labelled “**Push to Reset**”. Insert a small diameter allen key into the hole until it touches. Press and the device is reset.



## Portable Appliance Testing

Portable appliance testing should be carried out by a qualified person.

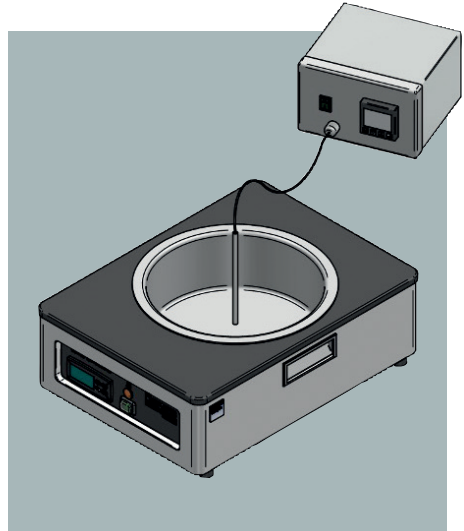
**! DO NOT PAT TEST THE BATH UNLESS IT CONTAINS WATER! THIS EQUIPMENT MUST NOT BE FLASH TESTED!**



## Calibration and Offset Instructions

Digital Section Bath has a factory offset value programmed into the temperature controller, this aligns the set temperature with actual factory setting  $42^{\circ}\text{C} \pm 1^{\circ}\text{C}$ . To calibrate the instrument for your application:

- 1 Fill the bath with distilled water to a level 5 mm from the top/ rim of the bowl.
- 2 Turn on the Digital Tissue Section Bath
- 3 Set the desired temperature following the Operating Instructions.
- 4 Allow the instrument to warm up for 60 minutes before taking a temperature reading, this will allow the temperature of the water in the bath to equilibrate.
- 5 Measure the temperature of the bath using a calibrated thermometer or calibrated digital liquid probe. The probe or thermometer should be positioned in the centre of the bath to a depth between 10 to 15mm from the surface the water.
- 6 The Digital Tissue Section bath has an accuracy of  $\pm 1^{\circ}\text{C}$ . If the temperature measured using the reference probe is within  $\pm 1^{\circ}\text{C}$  of the temperature shown on the display of the bath then the instrument is calibrated correctly, and no further action is required. If the temperature measured using the reference probe is within lower or higher than the temperature shown on the display by more than  $\pm 1^{\circ}\text{C}$  then the instrument will need to be re-calibrated.
- 7 Follow the steps outlined in 'Setting Controller Offset Parameters' to recalibrate the instrument.



## Setting Controller Offset Parameters

- 1 Press and hold the **P** button until **0** is displayed.
- 2 Use the **UP** arrow button to increase the number to **146**.
- 3 When **146** is displayed press the **P** button. **SPLL** is now displayed.
- 4 Press the **DOWN** arrow button to cycle through the sub menus until **OFS** is displayed.
- 5 When **OFS** is displayed, press the **P** button.
- 6 Using the **UP/DOWN** arrow buttons enter the new offset and then press the **P** button.
- 7 Press the **P** button again the press and hold the **UP** arrow to return to the main menu.

# Routine Inspection Recommendations

CellPath Ltd recommend that a simple annual inspection be made for all CellTec laboratory equipment in order that any malfunction can be identified and rectified as early as possible. This is to ensure user safety and prolong instrument life span.

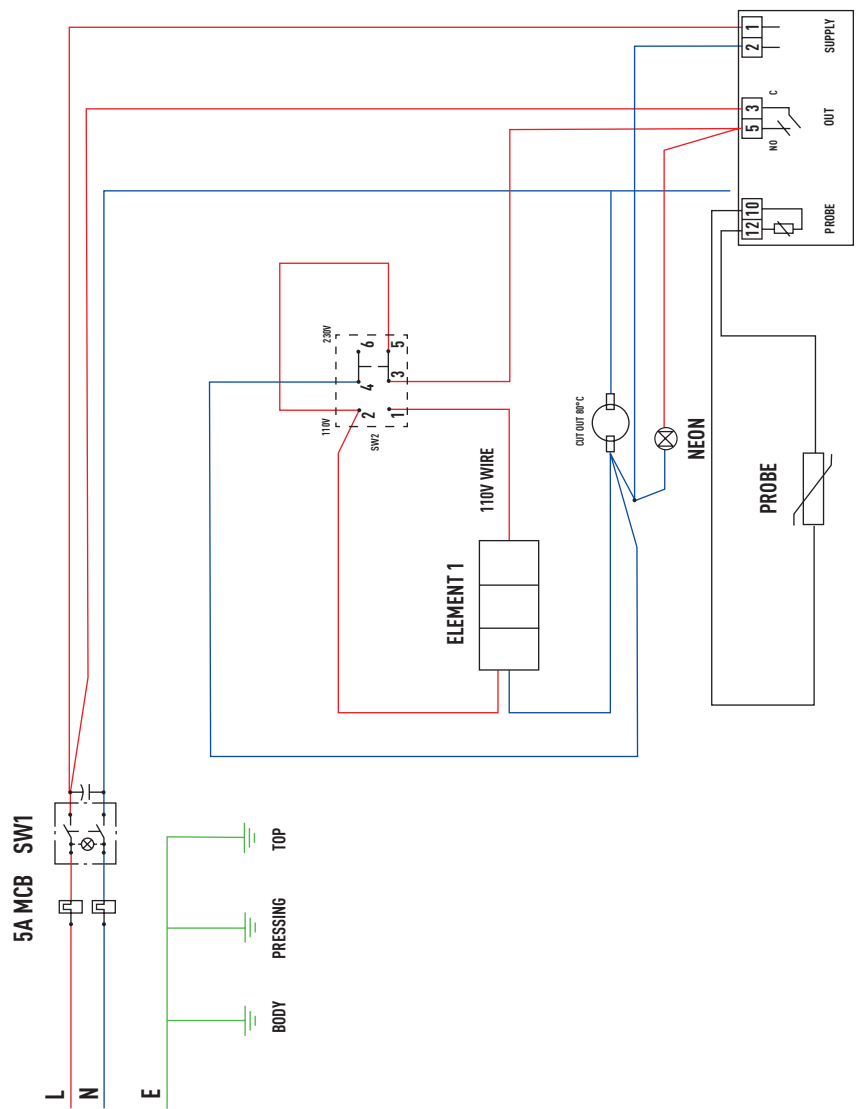
**Recommended checks to be made:**

- 1 Condition of Power Lead.  
A visual inspection to ensure the insulation is not damaged and that the correct fuse is fitted.
- 2 Functioning of Heater On Lamp.  
Heater lamp should be on when the instrument is warming up.
- 3 Surface of the bowl should be free of scratches and dents.

# Spare Parts List

Part Number	Description	Quantity Required
JBA-EE1198-00A	Mica Heater 400W	1 Off
JBA-EX1175-00A	Digital Temperature Controller	1 Off
JBA-ES0272-00A	Mains Switch	1 Off
JBA-EL0100-00A	Neon Amber and Tags	1 Off
JBA-EX1151-00A	Power Entry Module	1 Off
JBA-EX1212-00A	5A Circuit Breaker	2 Off
JBA-ET1160-00A	Temperature Sensor – NTC	1 Off
JBA-EH1242-00A	Thermal Cut Out 100°C	1 Off
JBA-SBF04491-00A	Heater Clamp Plate	1 Off

# Wiring Diagram



# Troubleshooting Guide

Symptoms	Possible Cause	Action Required
1. Unit does not operate/ No power to the instrument. <i>(Illuminated On/Off button not lit, temperature controller not lit.)</i>	A: Unit is not switched on. B: Unit not plugged into power supply. C: Circuit breakers have been triggered and need to be re-set. D: Fuse in instrument lead plug has failed. E: Power supply failure.	A: Switch On B: Plug in, and switch on unit. C: Re-set circuit breakers. D: Replace fuse or use a new lead set. E: Check that other electrical instruments on the same circuit are working. Check distribution board for a triggered circuit breaker or blown fuse.
2. Power is supplied to the instrument, but the water bath does not heat. <i>(Temperature does not rise on the controller and the orange heater light does not operate.)</i>	A: Thermal cut out has triggered. B: Temperature of water bath is set too low. C: Heating element has failed.	A: Re-set thermal cut out. B: Check set temperature of the water bath. C: Instrument should be checked by a competent person.
3. Instrument does not reach working temperature as quickly as expected.	A: Voltage selector set to the incorrect voltage.	A: Set the voltage selectors at the rear of the instrument to the correct voltage for your country.  <i>Instrument is expected to reach working temperature in 45 minutes.</i>
4. Temperature of water bath seems to be fluctuating more than expected. <i>(Expected temperature variation ±1°C from the set temperature.)</i>	A: Temperature control circuit fault.	A: Instrument should be checked by a competent person.

Symptoms	Possible Cause	Action Required
5. Temperature of the water bath shown on the controller, is different to the temperature of the water measured by a reference probe.	<p>A: External temperature probe being used is not suitable for water temperature measurements or external probe is not calibrated.</p> <p>B: Position of the external temperature probe is not at the calibration point. Bowl should be filled to within 15mm of the top of the bowl and measurement take 10mm from the surface of the water at the centre of the bowl.</p>	<p>A: Check correct probe is being used for measurement and that the probe is calibrated.</p> <p>B: Measure temperature at the position where the instrument is calibrated, using a calibrated probe.</p> <p>Users should wait at least 45 minutes before taking a measurement to allow the temperature of the water in the bath to equilibrate.</p> <p>If the temperature reading is significantly different, the instrument may need to be re-calibrated. Follow the calibration instructions.</p>
6. Temperature of the water bath continues to rise when not expected.	<p>A: Actual water bath temperature is lower than the set temperature</p> <p>B: Temperature control circuit fault.</p>	<p>A: Check the set temperature.</p> <p>B: Instrument should be checked by a competent person.</p>

## Warranty Terms and Conditions

- 1 CellPath Ltd warrants to the Customer that the product purchased is free from defects in materials and workmanship.
- 2 Provided the terms of payment are duly complied with, CellPath Ltd undertakes to remedy any original defects arising from faulty materials or workmanship, in any goods manufactured/supplied by CellPath Ltd, which under proper and normal conditions of use, may develop within a period of twelve months from the date of delivery.
- 3 In the case of components which by their nature of application have an unpredictable life, this guarantee shall only be to the extent of the guarantee given by the manufacturers of these articles.
- 4 CellPath Ltd will accept no liability, where in the opinion of the company the defect has been caused by damage due to the Customer's failure to follow operating instructions, correct installation, wear and tear, or damage due to the use of spare parts other than those spare parts of CellPath Ltd or which are recommended by CellPath Ltd, the defect has been caused by alterations or repairs being undertaken by a person(s) other than an authorised representative of CellPath Ltd.
- 5 Any damage claim must be in writing, and give the serial number and description of the goods, order number and date of delivery, and will not apply where any names or serial numbers or other information which may be attached to or inscribed upon the goods have been removed, covered up or defaced in any way.
- 6 Any goods or parts thereof, which may require repair or replacement, shall be repaired or replaced (*at the election of CellPath Ltd*) at the works of CellPath Ltd. The product to be repaired shall be delivered carriage paid back to CellPath Ltd by the customer at the Customer's risk and expense. Any such goods or parts will be delivered by CellPath Ltd to the Customer free within the United Kingdom but if required to be borne by the Customer. All faulty parts removed from the equipment will become CellPath Ltd's property. Any other repairs or work by CellPath Ltd will be carried out under the terms and conditions for specialist engineers currently in force.
- 7 In the event of replacement with a new or reconditioned model, the replacement unit will continue the warranty period of the original equipment.
- 8 If any goods or parts thereof are returned unnecessarily all cost involved, including a charge for inspection, handling and the return carriage must be paid by the sender. In no circumstances shall any of the goods be returned to CellPath Ltd without its prior written consent.
- 9 Please retain the original packaging over the warranty period. Any equipment returned under warranty should be in the original packaging. Any damages in transit resulting from using any packaging other than that originally supplied will be the responsibility of the Customer.

# Non Warranty Information

Spare parts shall be made available for a period of 5 years after a piece of equipment is discontinued.

CellPath Ltd  
80 Mochdre Enterprise Park  
Newtown  
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SY16 4LE  
United Kingdom



## Notes

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# Notes

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## EC Declaration of Conformity

We herewith confirm the following products:

**Tissue Section Bath (Round), Digital, 110-230V.a.c. 50-60Hz - JAW-0300-00A**

Conforms with requirements outlined  
by the following European Directives:

**Low Voltage Directive 2014/35/EU**

**EMC Directive 2014/30/EU**

**RoHS Directive 2012/65/EU**

Conforms with requirements outlined  
by the following United Kingdom Directives:

**Electromagnetic Compatibility Regulations 2016**

**Electrical Equipment (Safety) Regulations 2016**

**RoHS Directive 2012/65/EU**

Conforms with the requirements  
of the following standards:

**BS EN 61010-1:2010**

**BS EN 61010-2-010:2014**

**Safety requirements for electrical equipment  
for measurement, control and laboratory use.**

**BS EN 61326-1:2013**

**Electrical equipment for measurement control  
and laboratory use - EMC requirements.**

We confirm the declaration:

**Nickel Electro Ltd  
Oldmixon Crescent  
Weston Super Mare  
North Somerset  
BS24 9BL  
United Kingdom**



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