

ASSEMBLY AND OPERATING INSTRUCTIONS

BFS-60MP

CONTROLLER AND THERMOELECTRIC COOLING STAGE

Contents:

- 1. Contents of Box**
- 2. Unpacking Instructions**
- 3. Installation and Operating Instructions**
- 4. Warranty and Service**

PHYSITEMP INSTRUMENTS INC

154 Huron Ave

Clifton NJ 07013

1-800-452-8510

physitemp@aol.com

1. Contents of Box

1. BFS60MP Thermoelectric Cooling Stage
2. Extension Water Tubes (2 - 5 foot long tubes with Male self-sealing connectors and 2 – 5 foot long tubes with Female self-sealing connectors to a Y adapter for laboratory tap water supply)
3. BFS-60MP Control Unit
4. 110 VAC 20Amp Power cord
5. Instruction Manual

2. Unpacking Instructions

Remove contents of carton and check all items in the contents list are present. Visually check that everything is in good condition. If any item appears to be damaged or is missing please contact Physitemp Customer Service at: 1-800-452-8510

3. Installation and Operating Instructions

Mount the Cooling Stage on to the SM2500 Microtome by clamping the block on the underside of the stage into the Microtome Specimen Clamp. The wiring and water tubes may exit from the front or rear of the Microtome. Attach the Male connectors from the stage water tubes to two female fittings of the extension water tubing and connect the other end to the laboratory tapwater supply.

Connect the Female connectors from the stage to the two remaining extension tubes and place the open ends into the waste sink. Gently turn on the cold water supply until the water is spurting out from the ends of the tubes approximately 3 inches before dropping into the sink when the tubes are held horizontal.

Place the BFS60MP Controller to the side of the Microtome and connect the large black multi-pin connector on the stage to the mating female connector in the rear of the controller. The connector is polarized and uses a twistloc ring to secure the plug to the controller. Twist the ring in a clockwise direction to secure it.

Attach the blue thermocouple plug which breaks out from the wireform to the mating socket to the right of the black connector labeled ‘feedback sensor’. Ensure that the fan inlets on the front panel and outlet filters on the rear are not obstructed during operation. A good airflow is important for the satisfactory operation of the controller.

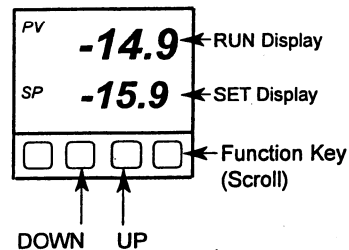
Attach the 110 VAC power cord to the socket on the rear of the controller and to a 20 amp AC outlet socket. Switch the power switch on the AC input module 'ON'. The display on the front panel controller will read '8.8.8.8' for several seconds to ensure that all display segments are operative.

In order to set the stage operating temperature you must follow the instructions found on top of the controller. These instructions are reproduced below in the event that those on the controller become defaced.

BFS-MP FREEZING STAGE

OPERATING INSTRUCTIONS

1. Connect stage to the Low Voltage Output on the rear panel. Connect the thermocouple sensor to the blue Feedback Sensor Socket on the rear panel. Connect the water tubes to a water supply or PTU-3 Pump and Tank Unit.
2. Connect controller power cord to a suitable AC outlet.
3. Turn on water supply. If using PTU-3 ensure that it is connected to Switched Auxiliary Outlet. (See Operating Manual for installation details.)
4. Turn on controller Power Switch (rear panel) and check that water is flowing through tubing.
5. Resetting the control temperature:
 - a) Press Function Key. SP will appear on display
 - b) Press UP or DOWN buttons and hold until desired set temperature is reached
 - c) Press Function key again to store new temperature
6. To easily remove specimens, hold the Freeze/Thaw switch in QUICK THAW position for several seconds until the specimen is released from surface of plate.



SPECIFICATIONS:

Operating Range: BFS-3MP and 5MP: -35°C to ambient; BFS-30MP: -40°C to ambient

AC Input Voltage: 110-130VAC or 220-240VAC, 50 or 60Hz user selectable(see Operating Manual)

SPECIAL DISPLAY INDICATIONS:

Fault condition lamp is illuminated - check Operating Manual for troubleshooting guide.

VIEWING ANGLE

The two front feet can be flipped down to adjust the viewing angle. Rotate feet down and towards the front until they lock in position. To return to original position, pull down slightly, then rotate back

Serial Number:

Made in USA

PHYSITEMP INSTRUMENTS INC

154 Huron Avenue
Clifton, NJ 07013 USA
Tel: 973-779-5577, Fax: 973-779-5954
www.physitemp.com

Before the surface of the stage freezes apply an ample amount of water/OCT/sucrose solution to form a base onto which you can freeze your specimen. Once the specimen has become attached freezing will be facilitated by building a dam of liquid around the sides of the specimen to reduce heat losses from the specimen to the surroundings. When the specimen is thoroughly frozen move the microtome sledge slowly back and forth under the knife to ensure that none of the wiring or water tubes are interfering with the operation of the microtome.

Quick Thaw feature

In order to quickly remove a frozen specimen from the stage, depress the white spring loaded on the front panel to the 'THAW' position and hold it there until the surface of the stage melts. Release the switch and quickly remove the specimen before the surface refreezes. Do not depress the switch longer than is necessary to remove the specimen as this may cause the stage surface to overheat.

Safety Features

A protection device built into the cooling stage disconnects power to the stage in the event that the water supply is not turned on or becomes disrupted or when the plate surface temperature exceeds 60 degrees Centigrade. In the event that either of these conditions should occur a warning lamp labeled 'Fault Condition' will be illuminated on the front panel. When the condition is rectified the lamp will extinguish.

In the event of a short circuit in any of the four independent power supplies in the controller shut off the AC power for 10 seconds and then reconnect. If the problem persists please contact our engineering department at 1-800-452-8510 between the hours of 9am-5pm EST.

4. Warranty and Service

In the event that a system is to be returned for repair, please pack it carefully and send it prepaid to:

SERVICE DEPARTMENT
PHYSITEMP INSTRUMENTS, INC.
154 HURON AVENUE
CLIFTON, N.J. 07013

Please include with the instrument:

1. A note describing any problems encountered.
2. The name and telephone number of a person we can contact.
3. The complete return address for shipping.

WARRANTY

Physitemp Inc. warrants this instrument to be free from defects in material and workmanship for 12 months from date of shipment. Repair or replacement will be made at no charge at the discretion of Physitemp if the defect is not the result of the misuse or abuse. Physitemp accepts no consequential liability for delay in delivery, alleged faulty performance of the product, or any other cases.

For your protection, please pack the item carefully and insure against possible damage or loss. Physitemp will not be responsible for damages resulting from careless packaging. Please return freight prepaid.