

Operating and Maintenance

Manual for the

BRIGHT WATER CHILLER



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SAFETY INFORMATION

Consumer Protection

The Consumer Protection Act 1987 Part 1, refers to Product Liability. This legislation was issued as a direct result of an EC Directive to all member states and has been in force with effect from 1st March 1988.

The Bright Instrument Co Ltd, ever mindful of the need to ensure that their products are not subject to misuse and/or incorrect handling, have made it their aim to communicate any possible dangers to their customers.

Whilst the Bright Instrument Co Ltd markets products manufactured to the highest safety standards it is in the interest of the purchaser that he is aware of the resultant dangers of misuse and/or incorrect handling of these products.

Your attention is therefore drawn to the following precautions:

Electrical

Warnings - A warning notice is fixed to the equipment stating that it should be disconnected from the mains supply before removing the panels. This warning should be strictly observed.

Fuses - Fuse ratings are clearly indicated on all fuse panels adjacent to the fuse holder. If and when replacement is necessary, the correct fuse rating must be adhered to.

Earthing (Grounding) - A protective earth terminal is fitted, and must be used in all two wire installations.

Accessories

Fluids supplied as accessories with Bright instruments such as Cryo-M-Bed and Cryospray 134 are strictly for laboratory use only. They should not be taken by mouth and precautions afforded to other laboratory chemicals should be adhered to. Please refer to the material safety data information for further details.

All Bright Instrument Co Ltd personnel are encouraged to make suggestions regarding product safety. We also welcome such suggestions from our customers. They may be submitted by completing the appropriate (Safety) section of the Quality Survey Record Form supplied with all Bright instruments, or alternatively by telephone or email. All communications should be directed to our Quality Assurance Department and will be acknowledged.

Decontamination Certificates

IMPORTANT

If the instrument or any part of it is to be returned to Bright Instrument Co Ltd, please note the following:

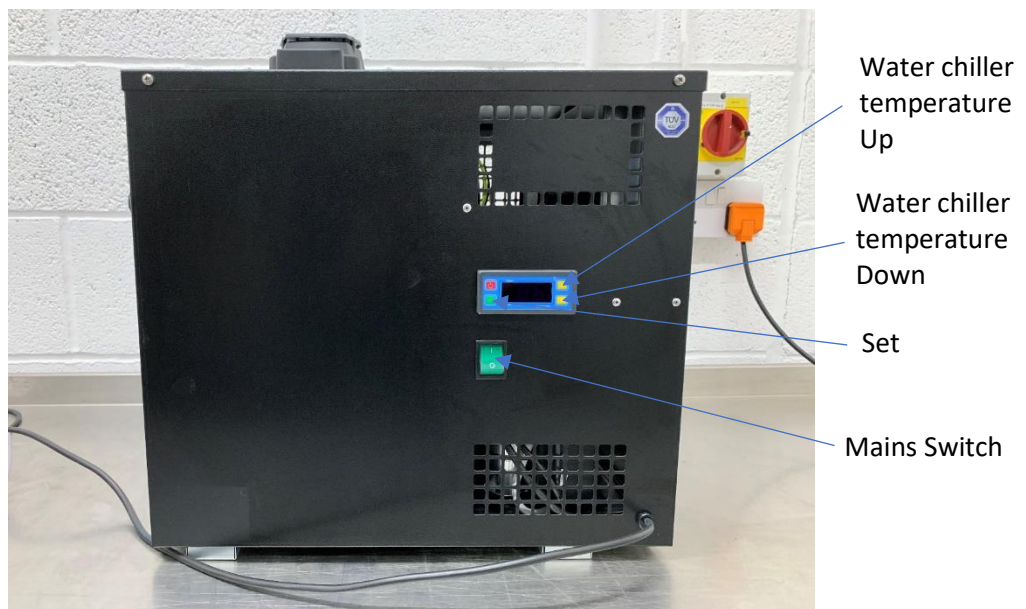
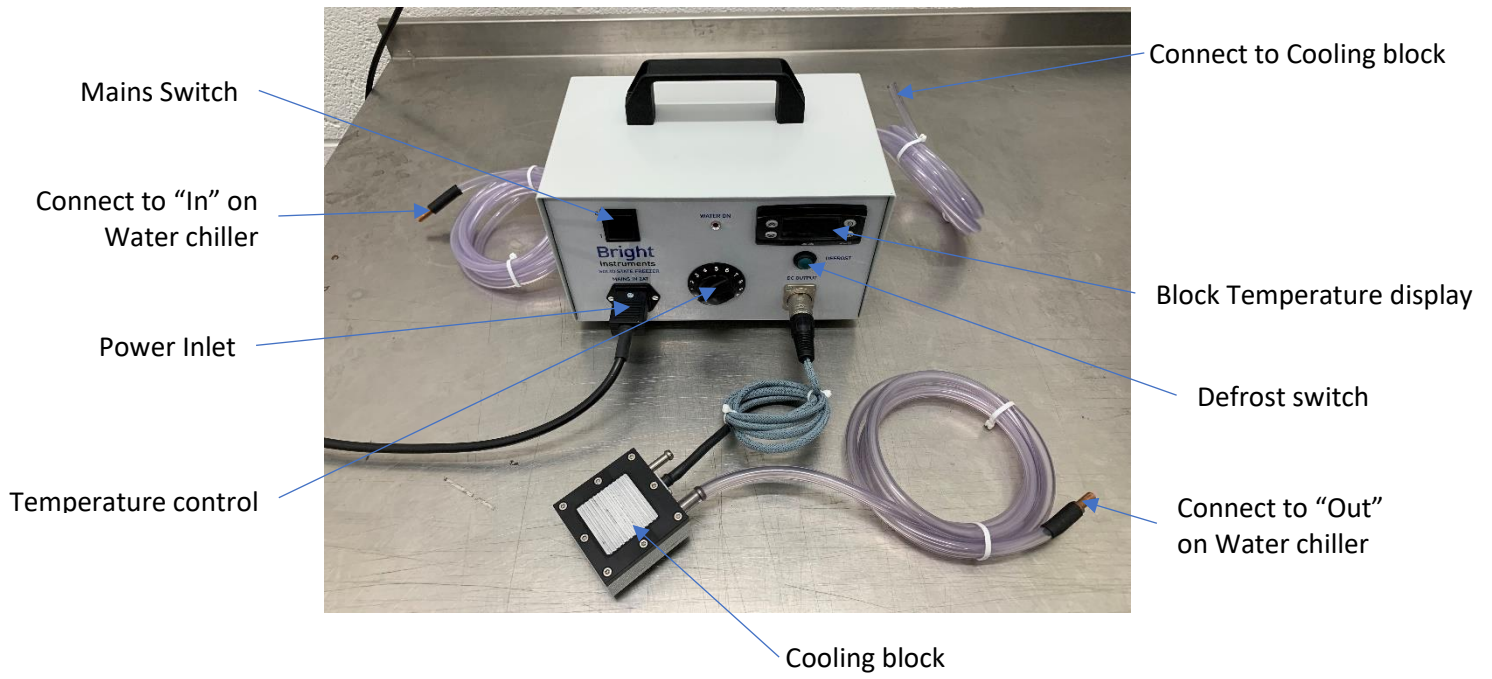
If the instrument or any part of it has been exposed to or been in contact with potential pathogenic or radioactive material, it is essential that it be decontaminated.

Set procedures are laid down by the Health and Safety Executive for decontamination. For the avoidance of doubt, we ask that instruments or parts returned to us should be accompanied by a completed decontamination certificate. A copy of this can be found at the back of this instruction manual and we suggest you use a photocopy of this when returning parts. Alternatively we would be pleased to either post or fax you another copy should you require.

Should the instrument or any part of it be received in a condition that Bright Instrument Co Ltd consider to be a potential biological hazard, the instrument or part will be returned, unrepared, at the expense of the customer.

Customs declarations must indicate that the package contains 'British Returned Goods'. Failure to do so will involve customs duty payable to us, which will be invoiced to the sender.

OVERVIEW





QUICK SET-UP

- 1) Read instructions carefully before starting installation.
- 2) Place chiller unit on a level surface, away from heat source and direct sunlight.
- 3) Remove “fill” plug and use supplied funnel to fill up tank with approx. 11 litres of cold water. The overflow will drip once the max level has been reached.
- 4) The Solid state Freezer has all water pipes attached.
- 5) The loose pipes are labelled “In” and “Out” and “Block” on the end of the “In” and “Out” pipes there are fittings that should be connected to the relevant connections marked in the preceding diagrams. The “Block” pipe connects to the water inlet pipe on the specimen block.
- 6) Once the pipes are connected to the chiller, the power supply can be connected then switched on by the mains switch.
- 7) The unit will start and the water will flow though the circuit. The chiller will take approximately 40 minutes to reach temperature of 3°C, to change the set temperature. Press set for 5 seconds use arrows to set temperature on the chiller.
- 8) The solid state freezer can be switched on and the block temperature can be controlled by the dial 1- 10.

MAINTENANCE

Cleaning

Before any cleaning of the machine, it must be disconnected from the main electrical supply.

Cleaning of the condenser can be done by following the procedure below, it must only be performed by a qualified person monthly basis by sweeping or by CO2 pressure.

- 1 Pull upwards to remove the fan cover from the metal slides.



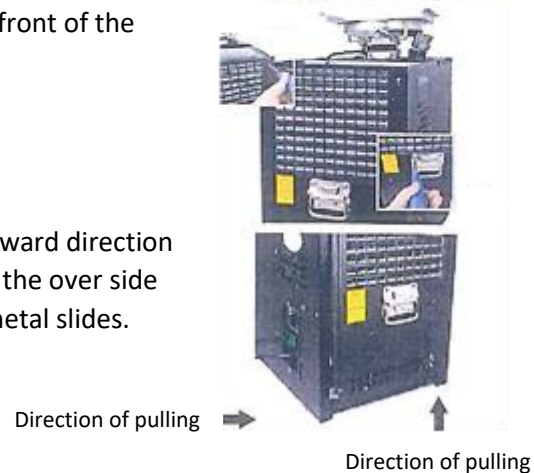
- 2 Remove the fan cover.



- 3 Unscrew the fastening screws on the side panel in front of the condenser.



- 4 First, pull out and loosen cover about 3cm in an upward direction (See image), then pull to the side before loosening the over side of the cover to enable it to be removed from the metal slides.



- 5 Now the condenser is accessible to clean either by brushing or air pressure from both sides.

Periodic Checks

- The power supply is firmly plugged into the socket
- The machine is not exposed to radiant heat
- The level of cleanliness of the water bath in the plastic container (Recommended to replace water every 6 months)
- Sanitizing

All other maintenance should be carried out by qualified person. For any help and guidance please contact Bright Instruments.