

DynaQube

Portable Sample Cooling Device



OPERATING MANUAL VERSION 1.00

Dynalab Corp. 175 Humboldt Street, Suite 300 Rochester, NY 14610

Tel: 800-334-7585 Fax: 585-334-0241 www.dynalon.com

E: dynaloninfo@dyna-labware.com

BEFORE USE:

Please read the following instructions:



Carefully read the operating manual first before operating the device.



For indoor use only



Ambient temperature range +5°C to +40°C



Use in a well-ventilated area.



Relative humidity not exceeding 80%



Mains supply fluctuation not exceeding 10%

Warranty

Dynalab Corporation provides a 90 day limited warranty for the devices in this series.

This warranty does NOT apply if damage is caused by fire, accident, misuse, neglect, incorrect adjustment or repair, damage caused by incorrect installation, adaptation, modification, fitting of non-approved parts or repair by unauthorized personnel. When returning any defective products, customers should be responsible for the shipping, handling and insurance costs.

LIMITATION OF LIABILITY

NOTWITHSTANDING ANY OTHER PROVISIONS HEREIN, UNDER NO CIRCUMSTANCES IS EITHER PARTY LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, MULTIPLE, ADMINISTRATIVE, OR PUNITIVE DAMAGES, OR ANY DAMAGE OF AN INDIRECT OR CONSEQUENTIAL NATURE ARISING OUT OF OR RELATED TO ITS PERFORMANCE, WHETHER BASED UPON BREACH OF AGREEMENT, WARRANTY, OR NEGLIGENCE AND WHETHER GROUNDED IN TORT, CONTRACT, CIVIL LAW, OR OTHER THEORIES OF LIABILITY, INCLUDING STRICT LIABILITY, EVEN IF ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES. THE COMPANY'S TOTAL LIABILITY INCLUDING, BUT NOT LIMITED TO, LIABILITY FOR INDEMNITY, DEFENSE, AND HOLD HARMLESS OBLIGATIONS IS LIMITED TO NO MORE THAN THE AMOUNT PAID TO THE COMPANY UNDER THE CUSTOMER'S ORDER AND THE CUSTOMER AGREES TO INDEMNIFY THE COMPANY FOR ANY EXCESS AMOUNTS. TO THE EXTENT THAT THIS LIMITATION OF LIABILITY CONFLICTS WITH ANY OTHER PROVISION(S) OF THIS AGREEMENT, SUCH PROVISION(S) WILL BE REGARDED AS AMENDED TO WHATEVER EXTENT REQUIRED TO MAKE SUCH PROVISION(S) CONSISTENT WITH THIS PROVISION.

Overview

The **DynaQube** is ideal for incubating any number of small laboratory sample vessels or micro tube sizes at sub-ambient temperatures for extended periods of time. DynaQube is an excellent alternative cooling device that replaces the need for those inconvenient and messy ice buckets that can often leave sample tubes floating in melting wet ice. This can lead to valuable sample loss and potential contamination. Each DynaQube is supplied with a pack of special ceramic coated metal beads designed to help maintain the cooling temperature while supporting the sample vessels during use. Beads are chemically inert and may be autoclaved (in a separate autoclavable container) if needed. Beads may also be pre-chilled prior to use for quicker cooling times. DynaQube is manufactured to fit standard aluminum block tube inserts and includes a protective lid which helps to maintain the cool temperature.

Two models to choose from:

DynaQube DQ1 is the standard analog cooling device. Set to maintain temperature at 0°C.

DynaQube DQ2 is the digital (display & setting) cooling device. Temperature range can be easily adjusted by the user from 0°C up to ambient 25°C.

Simply assemble the electrical cord and adapter, plug in and turn on your DynaQube. Adjust the DQ2 to its appropriate cooling temperature. Place sample vessels into the DynaQube.

No mess, no sample loss, no potential contamination, and an excellent value!

For additional information on other quality labware accessories that might be used with your new DynaQube please visit our Dynalon Labware web site at www.dynalon.com

Some examples include:

Microcentrifuge Tubes, PP, 0.5ml and 1.5ml, assorted colors

Microcentrifuge Tube Racks, HDPP, fit up to (100) 0.5ml and 1.5ml micro test tubes

Microcentrifuge Tube Rack, Step Design, PP, fit 0.5ml and 1.5ml micro test tubes

MiniFIX Fixed Volume Micropipettes, 5ul to 1000ul sizes. Color-coded.

Bio-bin® Waste Disposal Containers. For small laboratory waste items see the 2.5L Bio-bin.

And much more......





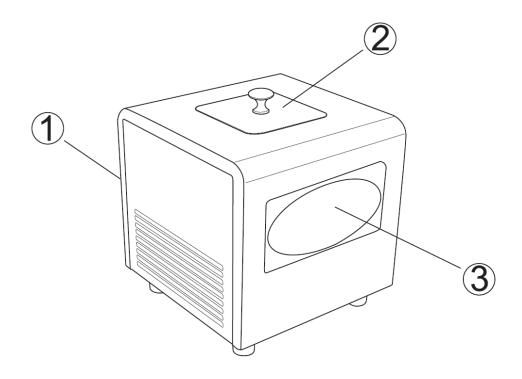


Figure 1: Overview of the DQ-I (1) case; (2) lid; (3) front panel

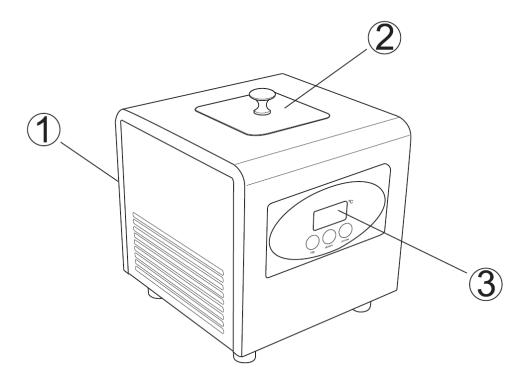


Figure 2: Overview of DQ-2 (Digital). (1) case; (2) lid; (3) front panel with digital display

Operation

Before Use. Please make sure you have carefully read this operating manual. If there are any questions related to the proper use of DynaQube please contact Dynalab Corporation, 175 Humboldt Street, Suite 300, Rochester, New York 14610.

Contact with low (cold) temperatures and vessels may cause cold burns. Please use care and wear protective gloves to protect hands. Do not place liquids directly into the DynaQube. DynaQube is rated to operate at 90-230V, output 12V, 5A, 60 W.

DQ-I: simply assemble the electrical cord to its adapter. Plug into the DynaQube and power outlet. Turn on the DynaQube. It will cool to a final set temperature of 0°C.

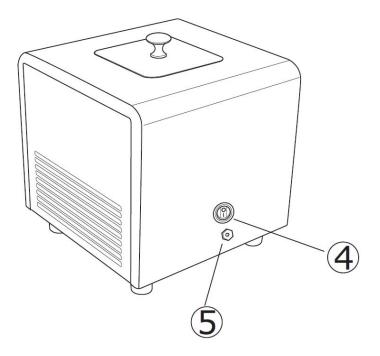


Figure 3: The rear view of DQ-I and DQ-2. (4) switch (5) power inlet

DQ-2. Once the power is on, the DQ-2 shows the actual temperature of the sample chamber. Press and hold "mode" key, it shows the set temperature, use the "up" or "down" key to increase or decrease the setting temperature. After programming desired temperature, release the "mode" key, and the actual temperature will be shown. The DQ2 will begin to ramp to set temperature.

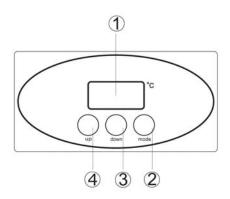


Figure 4: Overview of the front panel of DQ-2. (1) digital display; (2) mode (set key); (3) down key; (4) up key

Post Use. The DynaQube ceramic coated beads and any block insert may remain cold for some time. Allow to warm up to ambient temperature before removing from the DynaQube and make sure to ware protective gloves. Avoid handling cold objects with wet hands.

Maintenance. Before cleaning always be sure to disconnect the DynaQube from the power source. The outer casing of the DynaQube may be wiped clean with a damp cloth, mild detergent or ethanol. Do not immerse the DynaQube in water or solvents. Do not use aggressive solvents or abrasive cleaners. Before using any other decontamination method or lab solvent please check with Dynalab Corporation. Always dispose of any contaminated cleaning articles properly & safely.