

## Thermo Scientific Compact Drybath

### Heating Dry Bath Incubator

Compact Drybath S 100-120V (88871001)

Compact Drybath D 100-120V (88871002)

Compact Drybath S 200-240V (88871003)

Compact Drybath D 200-240V (88871004)

Operation Manual 0000850

Visit us online to register your warranty  
[www.thermoscientific.com/labwarranty](http://www.thermoscientific.com/labwarranty)

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## Safety Information

### Alert Signals



**Warning** Warnings alert you to a possibility of personal injury.

**Caution** Cautions alert you to a possibility of damage to the equipment.

**Note** Notes alert you to pertinent facts and conditions.



**Hot Surface** Hot surfaces alert you to a possibility of personal injury if you come in contact with a surface during use or for a period of time after use.



**Warning** If the Thermo Scientific Compact Drybath is used in a manner not specified by the manufacturer, the protection provided by the unit may be impaired.

Thank you for selecting Thermo Scientific for your equipment needs.

Your Thermo Scientific Compact Drybath has been designed with functionality, reliability, and safety in mind. It is your responsibility to use this instrument in conformance with local electrical codes. It is very important that the user follows installation instructions exactly as written. Do not attempt operation without this information.

### MANUAL NUMBER 0000-850

0	--	11/20/2014	Original	
REV	ECR/ECN	DATE	DESCRIPTION	By

### **Do You Need Information or Assistance on Thermo Scientific Products?**

If you do, please contact us 8:00 a.m. to 6:00 p.m. (Eastern Time) at:

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1-800-438-4851

1-877-213-8051

<http://www.thermoscientific.com>

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[www.unitylabservices.com](http://www.unitylabservices.com)

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Tech Support Email Address

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Our **Sales Support** staff can provide information on pricing and give you quotations. We can take your order and provide delivery information on major equipment items or make arrangements to have your local sales representative contact you. Our products are listed on the Internet and we can be contacted through our Internet home page.

Our **Service Support** staff can supply technical information about proper setup, operation or troubleshooting of your equipment. We can fill your needs for spare or replacement parts or provide you with on-site service. We can also provide you with a quotation on our Extended Warranty for your Thermo Scientific products.

Whatever Thermo Scientific products you need or use, we will be happy to discuss your applications. If you are experiencing technical problems, working together, we will help you locate the problem and, chances are, correct it yourself...over the telephone without a service call.

When more extensive service is necessary, we will assist you with direct factory trained technicians or a qualified service organization for on-the-spot repair. If your service need is covered by the warranty, we will arrange for the unit to be repaired at our expense and to your satisfaction.

Regardless of your needs, our professional telephone technicians are available to assist you Monday through Friday from 8:00 a.m. to 6:00 p.m. Eastern Time. Please contact us by telephone or fax.

International customers, please contact your local Thermo Scientific distributor.

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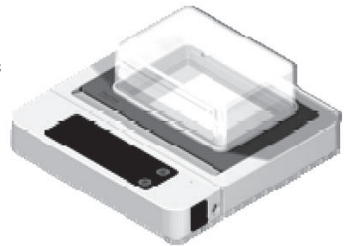
## Section 1 Introduction

Thermo Scientific Compact Drybath is a heating dry bath incubator. This unit will let you set the temperature between ambient +2°C - 100°C. Thermo Scientific Compact Drybath has a modular design of sample blocks to accommodate different sample tubes or plate.

It is recommended to cover the samples with the provided transparent block cover when possible. This cover provides thermal insulation and reduces water condensation. Water may condense on the sample blocks. Small amount of water is drained to lab bench through an opening at the bottom of the unit. Excessive water accumulation can be wiped off with paper towel.

Features:

- Small footprint, the thickness is 2.5cm
- Easy operation
- All-in-one function, various block configurations



### Packing List

Quantity	88871001	88871002	88871003	88871004
Dry Bath	1	1	1	1
Power Adaptor (12V)	1	1	1	1
Block Lifter	2	2	2	2
Plastic Lid	1	1	1	1
US Plug	1	1	NA	NA
EU Plug	NA	NA	1	1
UK Plug	NA	NA	1	1
CN Plug	NA	NA	1	1
User Manual	1	1	1	1



## Section 2 Product Specifications

Part Number	88871001	88871002	8871003	88871004
Power Input	12V DC, 5A	12V DC, 7A	12V DC, 5A	12V DC, 7A
Temperature range	ambient +2~100°C	ambient +2~100°C	ambient +2~100°C	ambient +2~100°C
Display accuracy (±)	0.1	0.1	0.1	0.1
Temperature accuracy (@ 37°C)	±0.5	±0.5	±0.5	±0.5
Temperature uniformity (@ 37°C)	±0.5	±0.5	±0.5	±0.5
Operation ambient temperature	8~40°C	8~40°C	8~40°C	8~40°C
Average heating rate (*from 30°C to 100°C, room temperature at 25°C, with one or two 0.2mL block)	16 min <sup>1</sup>	20 min <sup>2</sup>	16 min <sup>1</sup>	20 min <sup>2</sup>
Dimensions	185 x 185 x 25mm 7.28 x 7.28 x 0.98 in	200x200x25mm 7.87 x 7.87 x 0.98 in	185 x 185 x 25mm 7.28 x 7.28 x 0.98 in	200x200x25mm 7.87 x 7.87 x 0.98 in
Net Weight (with blocks)	<1 kg, <2.2 lbs	<1.5 kg, <3.3 lbs	<1 kg, <2.2 lbs	<1.5 kg, <3.3 lbs
<sup>1</sup> with one 0.2mL block				
<sup>2</sup> with two 0.2mL block				



**Section 2**

## Product Specifications

**Declaration of Conformity**

We hereby declare under our sole responsibility that this product conforms with the technical requirements of the following standards:

<b>CE LVD</b>	EN61010-1:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
<b>CE EMC</b>	EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use - EMC requirements - part 1: general requirements
<b>CE RoHS</b>	EN62133:2011/65/EU	Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment
<b>CSA</b>	CAN/ CSA C22.2 No. 61010-1-2012	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements - Third Edition
<b>UL</b>	UL 61010-1:2012	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
<b>FCC</b>	FCC Part 15 Subpart B:2013	Computing Devices, Cordless Telephones, Satellite Receivers, TV Interface Devices, Receivers, Low Power Transmitters
<b>IC</b>	ICES-001:2006	Industrial, Scientific and Medical (ISM) Radio Frequency Generators

## Section 3 Unpacking and Installation

The shipping carton should be inspected upon delivery. When received, carefully examine for any shipping damage before unpacking. If damage is discovered, the delivering carrier should both specify and sign for the damage on your copy of the delivery receipt.

Open the carton carefully, making certain that all parts are accounted for before packaging materials are discarded.

After unpacking, if damage is found, promptly report it to the carrier and request a damage inspection promptly.

**Important** Failure to request an inspection of damage within a few days after receipt of shipment absolves the carrier from any liability for damage. Call for a damage inspection promptly.

### Location

Find a convenient, draft-free location near a grounded electrical outlet meeting the power requirements listed on the unit nameplate.

Place the unit on lab bench or a similar sturdy and flat surface. The space between the bottom of the unit and the bench should be clear. The sides of the unit should also have at least two inch (5 cm) of clearance to allow ventilation.

### Heating Blocks

Select an aluminum-heating block designed for the test tubes or other vessels to be heated. Insert block(s) in the well on top of the unit.

### Section 3

Unpacking and Installation

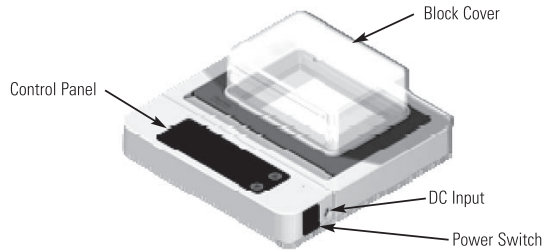
## Electrical Requirements

- Use a properly grounded electrical outlet of correct voltage and current handling capacity.
- Do not remove or modify grounded power plug.
- Use only properly grounded outlets to avoid shock hazard.

**Note** The block lifter is threaded into the hole to facilitate removal of blocks from the unit. ▲

**Note** Disconnect the unit from the power source when not in use. ▲

## Section 4 Operation



- DC input: Connect the 12V DC power adaptor
- Power Switch: Turns the unit off and on
- Temperature setting: Press the up and/or down arrow key to set the temperature.

### Setting the Temperature

1. Connect the 12 V DC power adaptor to the DC input terminal.
2. Plug the power supply into a wall outlet.
3. Turn on the Power Switch.
4. Press the up and/or down arrow key to set the temperature.



## Section 5 Maintenance

**Note** Make no attempt to service or repair a Thermo Scientific product under warranty before consulting your Thermo Scientific dealer. After the warranty period, such consultation is still advised, especially when the repair may be technically sophisticated or difficult. No merchandise should be returned directly to the factory without obtaining a Return Materials Authorization (RMA) number from Customer Service. ▲

**Warning** Disconnect unit from power source before performing any service or repair. ▲

**Note** Users are solely responsible for the decontamination of their unit(s) if hazardous material is spilled on or into the unit(s). ▲

**Note** Before using any cleaning or decontamination method except those recommended by the manufacturer, users should check with customer service that the proposed method would not damage the equipment. ▲

- Since the compact dry bath has no mechanical moving parts, they require very little maintenance beyond normal cleanup with a mild detergent and water.
- Turn the power switch to OFF and unplug the unit from its power source before attempting to clean up any spills or to perform maintenance, repairs or service. Allow unit to cool to near room temperature before removing the heating block(s).
- Remove the test tubes and/or other vessels from the heating block and wash them thoroughly or wipe them clean. Take the heating block from the well and wash in hot soapy water with a soft cloth. Holes in a block can be cleaned using a test tube brush. Rinse and wipe dry. Heating blocks can be submerged in hot water, but UNDER NO CIRCUMSTANCES SHOULD THE MAIN BODY BE IMMERSSED. Wipe the exterior and well with a wet cloth, taking care not to get water in the opening.
- Cover the samples with the provided transparent sample block cover when possible. This cover provides thermal insulation and reduces water condensation.
- Allow the opening to dry completely before installing blocks and reconnecting the power source.



## Section 6 Troubleshooting

The following is intended as a guide to help in servicing this unit, if problems should occur.

**Note** Before attempting any repair, disconnect power cord from outlet. ▲

<b>Problem</b>	<b>Possible Cause</b>	<b>Solutions</b>
The unit doesn't switch on	The unit is not plugged in, or is not plugged properly. The power switch is OFF Circuit board issue	Check the plug; Turn it ON. Contact customer service for help
The unit doesn't heat	Overheat switch is broken	Contact customer service for help
Temperature display: out of temperature range (ambient +2 to 100°C)	Sensor or circuit board issue	Contact customer service for help





## Section 7 Accessories

HEATING BLOCKS	NO. OF HOLES	WEIGHT	CATALOG NO.
24 x 0.2ml block	24	65g	88871101
12 x 0.5ml block	12	130g	88871102
6 x 1.5ml block	6	140g	88871103
6 x 2.0ml block	6	110g	88871104
6 x 15ml block	6	560g	88871105
3 x 50ml block	3	380g	88871106
96-well / Flat bottom block	96	340g	88871107



### **THERMO FISHER SCIENTIFIC STANDARD PRODUCT WARRANTY**

The Warranty Period starts two weeks from the date your equipment is shipped from our facility. This allows for shipping time so the warranty will go into effect at approximately the same time your equipment is delivered. The warranty protection extends to any subsequent owner during the first year warranty period.

During the first two (2) years, component parts proven to be non-conforming in materials or workmanship will be repaired or replaced at Thermo's expense, labor included. Installation and calibration are not covered by this warranty agreement. The Technical Services Department must be contacted for warranty determination and direction prior to performance of any repairs. Expendable items, glass, filters and gaskets are excluded from this warranty.

Replacement or repair of components parts or equipment under this warranty shall not extend the warranty to either the equipment or to the component part beyond the original warranty period. The Technical Services Department must give prior approval for return of any components or equipment. At Thermo's option, all non-conforming parts must be returned to Thermo Fisher Scientific postage paid and replacement parts are shipped FOB destination.

**THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED. NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY.** Thermo shall not be liable for any indirect or consequential damages including, without limitation, damages relating to lost profits or loss of products.

Your local Thermo Sales Office is ready to help with comprehensive site preparation information before your equipment arrives. Printed instruction manuals carefully detail equipment installation, operation and preventive maintenance.

If equipment service is required, please call your Technical Services Department at 1-800-438-4851 (USA and Canada) or 1-740-373-4763. We're ready to answer your questions on equipment warranty, operation, maintenance, service and special application. Outside the USA, contact your local distributor for warranty information.

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