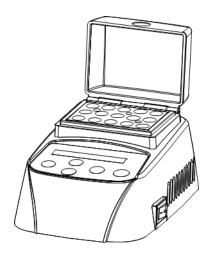
Instruction Manual

Block Incubator

WSC-2615

MyMiniBLOCK C&H



6th Edition May 5, 2023

Table of contents

Int	rodu	ction	2	
Αk	out t	his manual	2	
So	fety p	precautions	2	
O	oerat	on precautions	4	
No	otices		5	
1	Ove	rview	6	
	1.1	Purpose	6	
	1.2	Principle	6	
2	Insp	ection when unpacking the product	6	
	2.1	Inspection at unpacking	6	
	2.2	Product component	6	
3	Name and function			
	3.1	Main unit	7	
	3.2	Accessories	7	
	3.3	Operation panel	8	
4	Preparation9			
	4.1	Installation environment	8	
	4.2	Installation	1 0	
5	Ope	ration	11	
	5.1	How to change time units	11	
	5.2	Temperature / time setting and operation method	12	
	5.3	Temperature calibration	15	
6	Trou	bleshooting	16	
7	Mair	ntenance	16	
	7.1	Cleaning	16	
	7.2	Inspection	17	
	7.3	Maintenance / repair	17	
8	Spe	Specifications 18		
9	Option 1 8			

Introduction

Thank you for purchasing our block incubator "WSC-2615 MyMiniBLOCK C&H". This instruction manual (i.e. this document) is delivered to you together with the device so that you can make full use of the device. Not only those of you who use this device for the first time, but also those who have used it before, should read this document carefully to understand the contents. If you use this device for the first time, please read this document in order from the beginning. In addition to how to use it, this document contains information related to maintenance, guarantee and services as well. Please keep it handy all the time to make full use of it.

If you have any inquiries on your purchased product or the instruction manual, please feel free to contact us. (Please refer to the back cover.)

About this manual

Before using the product, please read this document carefully. After reading, please be sure to keep it for your future reference. When you relocate this device, be sure to attach this document to it.

If there is any defect in this document such as misplaced or missing pages, or if this document is lost or tainted, we will replace it with a new one. Please contact to the distributor you purchased the product or us (please refer to the back cover). At that time, please inform us of your product name and model. This document was created with our most careful attention; however, should you find any queries, errors or omissions, please inform us (please refer to the back cover).

Safety precautions

To use this device safely, it is a must to operate it properly. Do not use this product until you read this document carefully and fully understand this manual. Precautions on usage and safety described in this document are applied to the use of this device only for the specified purpose of use. Do not use this device for any other purpose than described here, or do not use this device by any other method than described in this manual, the operator is responsible for all necessary safety measures.

If this device is operated for the first time, it should be supervised by an experienced person who has proper knowledge and understanding of the operations and methods. In addition to first-time users, experienced users who have received specialized training should also keep the instruction

manual handy and make effective use of it. In order to prevent any electric shock caused by the device or any damage to the device, please understand and follow the correct operation method shown in this manual. If you have any questions or concerns related to the operation of maintenance or inspection, feel free to contact us (please refer to the back cover).

Safety symbols

To use this device safely and maintain the safe status, the following symbols are indicated in the instruction manual and on the device's main unit. Please note the meaning of each symbol and observe each item.

Symbol	Description
⚠Danger	This symbol indicates emergent danger, such as death or heavy injury caused by ignoring the symbol and mishandling the device.
Warning This symbol indicates possibility of danger, such as death or injude caused by ignoring the symbol and mishandling the device.	
This symbol indicates possible occurrence of physical damage by ignoring the symbol and mishandling the device.	
0	This symbol indicates prohibition.
T T	This symbol indicates an important matter.
	This symbol indicates a tip related to the operation.

CE Marking



Complies with the provisions of following Directives as completed equipment under evaluation of conformity based on the following harmonized standard.

Directive	Test Standard
Low Voltage Directive, 2014/35/EU	EN 61010-1:2010
EMC Directive, 2014/30/EU	EN 61326-1:2013
RoHS Directive, 2011/65/EU	EN IEC 63000:2018



Indicate disposal instruction.

DO NOT dispose of this product in the trash.

To ensure utmost protection of the global environment and minimize pollution, please recycle this unit.

Operation precautions

These are precautions for preventing fire, electric shock and other accident or failure. Read and understand the information well, and be sure to observe it.

\triangle Danger

Power supply connection	Do not use a deformed or corroded electrode terminal, AC adapter, power cable whose insulation coating is peeled off, or damaged power cable. In addition, do not connect any AC adapters other than the one supplied with the device. Before operating this device, check and confirm that there is no damage to it. Otherwise, it may catch fire or cause electric shock due to loose connection. If there is any damage, stop using this device and contact our company (please refer to the back cover). After use, be sure to turn off the power switch and disconnect it from the outlet. When disconnecting AC adapter from the outlet, be sure to turn off the power switch, and then disconnect it by holding the AC adapter instead of pulling the cable.
No wet hand	When handling this device, keep your hands dry. Do not touch AC adapter with wet hands. If you do, electric shock or failure may be caused.
	If the power cable gets wet, do not use it. If you do, electric shock or failure may be caused.
Main Unit	Do not put any debris, aggregation or clumps into this device. If you do, electric shock or failure may be caused. If the external surface of this device gets wet, do not use it. If you do, electric shock or failure may be caused. When using the device, wipe off any moisture on the surface and keep it dry.
Maintenance A	If an error occurs or there seems to be an error or failure while this device is being used, stop using it immediately. If you find any defect at the time of inspection, do not use this device. If you do, electric shock or defect may be caused. During use, visually inspect the device periodically for abnormalities such as abnormal noise, smoke or liquid leakage. If you find an error, failure or defect, discontinue use and contact us (please refer to the back cover).
High temperature warning	The aluminum block may be hot during and immediately after use of this device. Do not allow direct contact with the human body. It may cause burns, accidents or other harm to the human body.
Reagents	Powerful drug, hazardous, carcinogenic substances, etc. may be used in reagent preparation and so on. Avoid direct contact with the human body. It may cause death, burns, or other harm to the human body. When using chemicals, protect yourself with gloves, masks, etc., and carefully read and follow the instruction manual attached to the chemical.

√Waming

₹ IZwaming	
Installation	Do not install the device on an unstable table, tilted place or a heavily vibrating place. Install it on an experimental table with horizontal, stable and solid surface. Otherwise, electric shock due to falling or liquid leakage may be caused. Do not put any object on this device. If you do, electric shock due to falling may be caused.
Main Unit	This device is not of explosion-proof structure. Install it at the place where there is no exposure to fire or combustible gas. When taking this device out of a low-temperature room for use, take measures against dew condensation before moving it. If condensation is seen, dry it completely. It may cause an electric shock or malfunction.
Transfer	Do not touch or move any part of the unit other than the operation panel while the unit is in operation. The electric cords may get entangled and the device may fall. When moving this device, be sure to turn off the power switch, unplug the AC adapter, and disconnect all wiring cables.
Maintenance	When you execute maintenance or cleaning, be sure to turn off the switch of the power supply and disconnect the AC adapter. To maintain good performance and safety of this product, please ask us for periodical maintenance, inspection and calibration.
No disassembly	Do not disassemble or modify this device. Do not remove the external cover. Interior adjustment or repair of this product should be made by our engineers. If adjustment or repair needs to be done, please ask us (please refer to the back cover). We will not accept any responsibility for any accident or failure caused by disassembly or modification done by yourself.
Label sticker	Do not remove the warning label. It indicates the dangerous parts of the device. If the sticker is removed or becomes dirty and unreadable, please contact us.
AC adapter	Do not use the AC adapter of this device for any purpose other than the operation of this device. It may cause malfunctions or accidents. We are not responsible for accidents or failures caused by using the AC adapter of this device for anything other than this device. If this device is used outside Japan, prepare the conversion adapter complying with the standards of the country where you use it. If a non-standard adapter is used, heat generation or ignition may occur. If you have any inquiries, please contact us or the distributor from whom you purchased.
A	

Caution

Label sticker	The label sticker shows important information for maintenance and manage-
Label slickel	ment of the product. Do not peel it off.

Notices

Application	This device is for life science research use only.		
	It's not a medical device and cannot be used for medical treatment, such as making medical-related judgments or confirming the effectiveness of treatment.		
Export	Export of specific work and cargo are controlled by Foreign Exchange Laws and Cabinet Order/Ministerial Orders of Foreign Trade Control Laws and those controls are applied to this unit. Even if the unit is not applicable to the Cabinet Order, it's required to submit documents accordingly and if it's applicable, then obtain export license from the Ministry of Economy, Trade and Industry, and then submit the license to the customs office. When you export our products, please confirm with your supplier or us in advance.		
Trademarks/ Copyright	You are hereby notified that any distribution, copying or forwarding of this manual is strictly prohibited without permission of ATTO Corporation. Information in this manual or specification of the product is subject to change without notice.		

1 Overview

1.1 Purpose

My MiniBlock C&H is designed to incubate samples at temperatures from 0 to 100°C. It is compatible with 0.2 mL, 0.5 mL, 1.5 mL, 2 mL, 15 mL, 50 mL tubes and 10 mm square cells.

1.2 Principle

This device heats and cools an aluminum block using a Peltier element. The temperature of the aluminum block is detected by a thermal sensor, and the temperature is controlled by microprocessor control.

2 Inspection when unpacking the product

2.1 Inspection at unpacking

Upon arrival of the product, please confirm whether the main body and accessories are packed correctly or if any defects exist. In case there is any inadequacy, deficiency, etc., please inform your supplier or us immediately.

Please unpack and inspect the contents within a week of receiving the product.

Confirmation after more than a week may not be warranted for defects or missing items.

2.2 Product component

This device consists of a main body and accessories.

Main body

Model	WSC-2615
Product code	4002615
Main body	MyMiniBlock C&H

Accessories

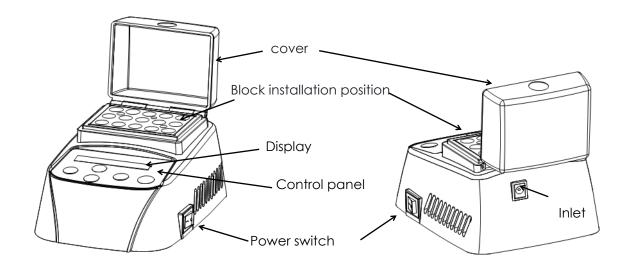
AC adapter	1
Instruction manual	1
Screwdriver for block removal	1
Hexagonal wrench	1

Optional accessories

Code#	Product name / Description
4002640	Block for 40pcs x 0.2mL Micro Tube for WSC-2610/ 2615
4002641	Block for 24pcs x 0.5mL Micro Tube for WSC-2610 / 2615
4002642	Block for 15pcs x 1.5mL Micro Tube for WSC-2610 / 2615
4002643	Block for 15pcs x 2.0mL Micro Tube for WSC-2610 / 2615
4002644	Block for 8x12.5x12.5x32mm Cubic Cell for WSC-2610 / 2615
4002645	Block for 4pcs x 15mL Centrifuge Tube for WSC-2610 / 2615
4002646	Block for 2pcs x 50mL Centrifuge Tube for WSC-2610 / 2615

3 Name and function

3.1 Main unit



3.2 Accessories

AC adapter

This AC adapter can be used from AC100V to AC240V.

It supplies DC24V to the power supply unit.



Screwdriver for block removal

Used to remove the block.

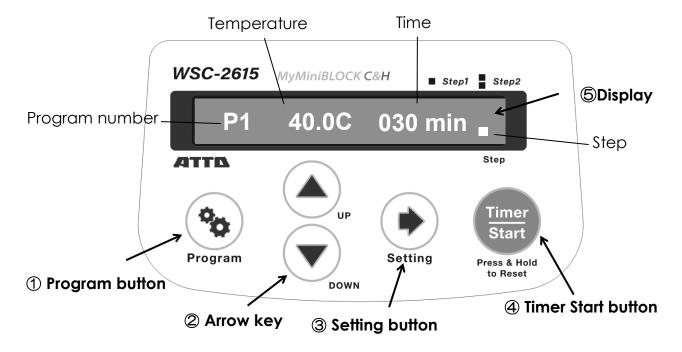


Hexagonal wrench

It is used to fasten the screws that fix the block to the body.

Please refer to the page 10.

3.3 Operation panel



1) Program button

Used to select a program number (P1 - P9).

Program number can be changed by pushing the button.

②Arrow key

Used for temperature and timer settings.

Press the arrow keys to change the temperature and timer settings.

If either arrow key is pressed after sleep mode or condition setting, heating/cooling will start automatically after about 10 seconds.

After reaching the set temperature, it will be maintained.

3Setting button

Used to set temperature and timer. Press the button to move the cursor.

(4) Timer Start button

When the button is pressed, the Peltier element turns on and heads toward the set temperature.

After reaching the set temperature, the timer will automatically start.

Press and hold the button to stop the device and return to room temperature. If the set temperature is in standby mode, the timer will start by pressing the button.

If you press the Timer Start button while setting the temperature and timer, the setting screen will switch from STEP 1 to step 2.

5Display

Program number, temperature (current temperature), time (remaining time, countdown), and steps are displayed.

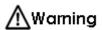
4 Preparation

4.1 Installation environment

Please use this device under the following condition.

Location

Inside a room only 5° C to 35° C



Do not install the product in combustible gas atmosphere. It is not of explosion -proof structure, so the product may cause explosion or fire. Install it in an environment without combustible gas. Do not install the product in corrosive gas atmosphere. This is because it can cause corrosion of conductor inside this product or contact failure of connecter, which may lead to malfunction, failure or fire. Do not install the product in an environment with much dust or dirt. Dust or dirt may stick to the product, which can cause electric shock, fire or failure.



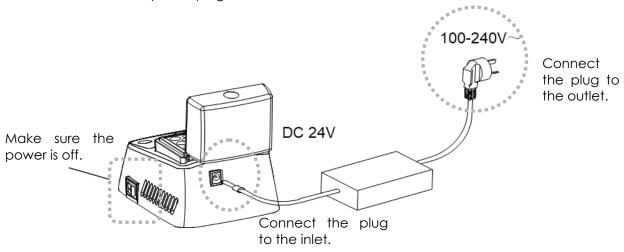
Do not use the product at a place where there is strong magnetic or electric field around, or a place where there is much waveform strain of input power supply or noise. It may cause malfunction.

Do not install the product at a place where it is exposed to direct sunlight, where temperature suddenly changes, or where humidity is high.

If dew condensation occurs, do not use this product. This device cannot be used outdoors, It is designed to ensure safety and performance under the following environmental conditions: ambient temperature 5° C to 35° C, relative humidity 5° -70%(No dew condensation).

4.2 Installation

- 1. Make sure that the power switch is off(o).
- 2. Connect the DC plug of the AC adapter to the inlet on the back of the main body.
 - 3. Connect the power plug into the outlet.



- 4. Set a block on the Block installation position.
- 5. Fix the block to the body.
 Tighten the fixing screws provided with the block using the hexagonal wrench attached to the main unit.







*4 x 15mL blocks for C.T (4002645) and 2 x 50mL blocks for C.T (4002646) can be used by filling the tube holes of the aluminum block with water to increase thermal conductivity.

If water overflows, wipe it off immediately. If water enters the device, stop using it immediately and contact us.

5 Operation

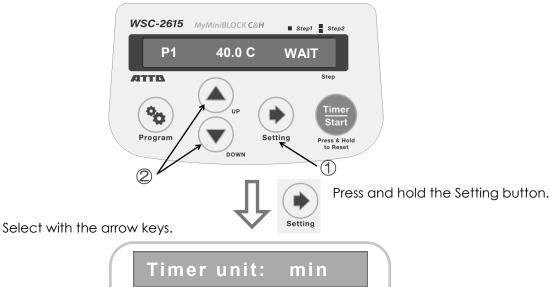
5.1 How to change time units

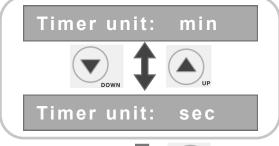
The time unit can be selected from [min (minutes)] and [sec (seconds)].

- 1. Turn on the power switch on the back of the main unit.
 - A beep sounds and [System Setting] is displayed.
- 2. "WAIT" is displayed and the last program is started.
- 3. Press the Setting button (1).
- 4. When the cursor appears, press and hold the Setting button (1).
- 5. The display will change to the time unit setting screen.
- 6. Select "min (minutes)" or "sec (seconds)" with the arrow (▲/▼) keys (②).
- 7. Press the Setting button to confirm (1).
- 8. Returns to the program execution screen.

*The time unit can be changed for each step of the program.

If the time unit setting screen is displayed while either STEP 1 or 2 of the selected program is displayed, the time unit for that program step will be changed.





Press the Setting button to confirm.



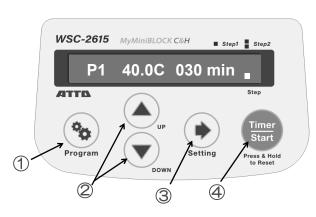
Return to the program execution screen.

5.2 Temperature / time setting and operation method

Each program can set temperature and timer for 2 steps. (Step 1 and 2)

- 1. Turn on the power switch on the back of the main unit. "System Setting" is displayed with a beep sound.
- 2. "WAIT" is displayed, and the last running program will automatically start.
- 3. Press the Program button to select the program from P1 to P9 (1).
- 4. After selecting a program, press the Setting button to move the blinking part (3).
- 5. Set the temperature with the arrow keys(2).

*The blinking number can be changed.



- 6. Press the Setting button to move the blinking part to the timer display (3).
- 7. Set the appropriate time with the arrow keys.(2)

*Press and hold the Setting button on the setting screen to change the time unit to "min"

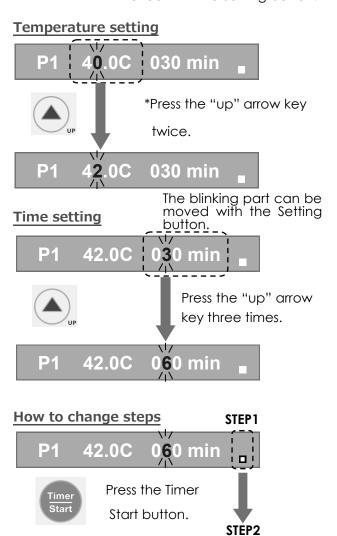
"sec".

*If the time for STEP 1 is set to "000 min/sec," STEP 1 will be skipped and STEP 2 will be started.

- 8. Then set step 2. If STEP 2 is not required, set the same temperature as STEP 1 and set the time to "000 min/sec.
- 9. Press the Timer Start button on the setting screen (when the blinking part is displayed), and it will switch to the screen for setting the temperature and time in STEP 2 (4).
- 10. Set the temperature and time for STEP 2 using the Setting button and arrow keys as in step 1.
 - *Press and hold the Setting button on the setting screen to change the time unit to "min"

 "sec".

The blinking part can be moved with the Setting button.



*If STEP 2 is not required, set the same temperature as STEP 1 and set the time to "000 min/sec".

060 min

50.0C

- 11. Once the settings are complete, wait until the display changes. After a few seconds, the time display changes to "WAIT".
 - *If you want to reset the value, press the Setting button again.
- 12. The temperature control starts automatically.
 - *When the Timer Start button is pressed, the timer starts counting down as soon as the set temperature is reached.
- 13. When the set temperature is reached, the "WAIT" display changes to "OK" and the device enters standby mode while the set temperature is maintained.
- 14. Press the Timer Start button to start the timer with a "beep" sound (4).
 - * The timer is a countdown type. Remaining time is displayed.
 - * When the timer starts, the step display blinks.

*If the Timer Start button is pressed and held while the device is running, the timer will stop and "WAIT" will be displayed. "OK" is displayed at the set temperature and the device returns to standby mode. Note that the equipment does not stop.

To standby at set temperature.

Setting screen

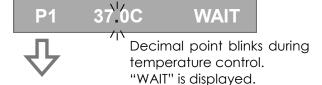
P1 42.0C 060 sec



Number blinks during setting.

Setup completed

⇒Temperature control starts



Standby at the set temperature





Changes to "OK" display. Decimal point blinks.



Press the Timer Start button

Countdown starts



STEP blinks

To start the timer immediately after the set temperature is reached.

Setting screen

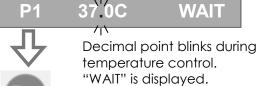




Number blinks during setting.

Setup completed

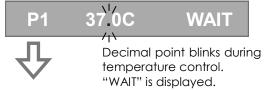
⇒Temperature control starts





Press the Timer Start button

Temperature control



Reach the set temperature

⇒Countdown starts

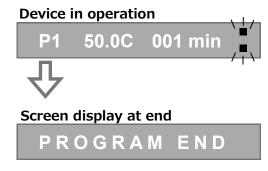


STEP blinks

15. When STEP 1 is completed, a beep sounds and heating/cooling to the set temperature in STEP 2 starts automatically. The set time of STEP 2 is displayed.

*If STEP 2 is not required, set the same temperature as in STEP 1 and set the time to "000 min/sec. PROGRAM END" will be displayed after STEP 1 is completed.

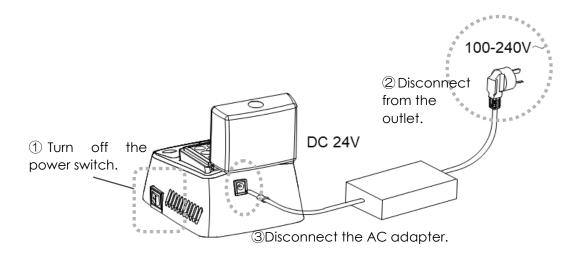
16. When the set temperature in STEP 2 is reached, the timer starts automatically. The two squares indicating the step will blink.



17. When STEP 2 is completed, "beep", "beep", "beep"... sound will be heard and "PROGRAM END" will be displayed.

*When using at high temperature, it is recommended to set the room temperature (25-35°C) in STEP2 to prevent burns and accidents.

18. Turn off the power switch on the back of the main body.
*The power switch can be turned off even when the main body is in operation or in the "OK" or "WAIT" mode.

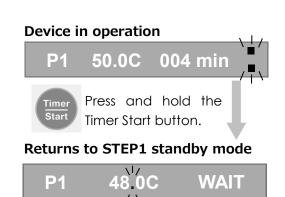




The aluminum block may be hot just after using the main body. It should be removed from the main body and cleaned after the temperature has cooled sufficiently.

Other operations

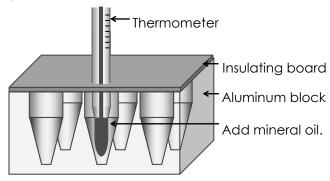
- After "PROGRAM END" is displayed, press the Timer Start button to start controlling the set temperature in STEP1. When the set temperature is reached, "OK" is displayed and it will be standby mode.
- When the device is in operation, press and hold the Timer Start button, the time display will show "WAIT" or "OK" and it will be in standby mode at the set temperature in STEP 1.

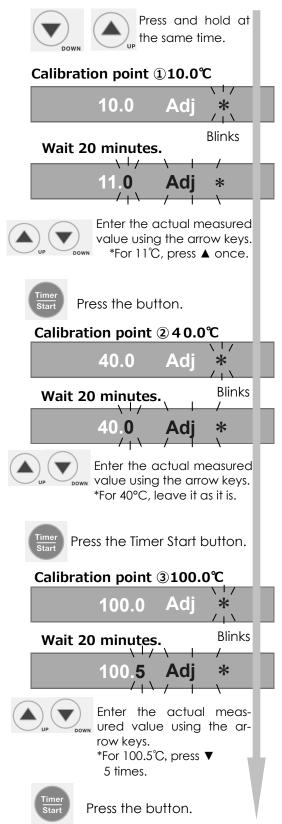


5.3 Temperature calibration

This device has been calibrated (3-point compensation at 10°C, 40°C, and 100°C) prior to shipment, so calibration is not required. If you need to calibrate the temperature for some reason, please refer to the calibration method below.

- 1. Make sure that the room temperature where calibration is performed is below 35°C.
- 2. Turn on the power switch on the back of the main body.
- 3. Pour mineral oil directly into the aluminum block and place a thermometer in it.
- 4. Cover with an insulating board.
- 5. Press and hold the up and down arrow keys at the same time. The display changes to "OO.O Adj * (* blinks) ". "*" will blink and temperature adjustment to the first calibration point of 10.0°C starts.
- 6. After 20 minutes, the display will change to "10.0 Adj * (Adj * blinks) ". Check the temperature on the thermometer and enter the actual measured value using the arrow keys.
- 7. Press the Timer Start button.
- 8. The display changes to "OO.O Adj * (* blinks) ". "*" will blink and the temperature adjustment will automatically start to 40°C, the second calibration point.
- 9. After 20 minutes, the display will change to "40.0 Adj * (Adj * blinks) ". Check the temperature on the thermometer and enter the actual measured value using the arrow keys.
- 10. Press the Timer Start button.
- 11. The display changes to "OO.O Adj * (* blinks) "."*" will blink and the temperature adjustment will automatically start to 100°C, the third calibration point.
- 12. After 20 minutes, the display will change to "100.0 Adj * (Adj * blinks) ". Check the temperature on the thermometer and enter the actual measured value using the arrow keys.
- 13. Press the Timer Start button to confirm.





6 Troubleshooting

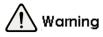
Symptom	Cause	Remedy
No indication of the display.	There is a problem with the power cable connection.	Make sure the cable is properly connected without any looseness.
An alarm sounds with the display of "open1".	open1: The temperature sensor may be damaged or the con- tact may be poor.	Stop using it immediately and contact ATTO (please refer to the back over) .
An alarm sounds with the display of "short1/2".	The block sensor is damaged and shorted.	Stop using it immediately and contact ATTO (please refer to the back over) .
An alarm sounds with the display of "err1/2".	The sensor in the block is damaged.	Stop using it immediately and contact ATTO (please refer to the back over) .
Block is not being heat- ed/cooled.	There is an abnormality such as damage to the Peltier element or Peltier.	Stop using it immediately and contact ATTO (please refer to the back over) .
No response when buttons are pressed.	There is an abnormality such as poor contact of the button.	Stop using it immediately and contact ATTO (please refer to the back over) .

7 Maintenance

7.1 Cleaning



When cleaning the device, do not use corrosive detergent or materials.



To clean the unit, turn off the power switch and disconnect the power cable.

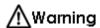


Just after using heated block, the block may be still hot. Wait for a while till it becomes normal temperature for cleaning.

Aluminum block	If the surface of the aluminum block or the inside of the wells become dirty, wipe them thoroughly with a soft cloth soaked in water-diluted neutral detergent or alcohol. Also, do not use until the inside of the well is sufficiently dry.
Main body	If the surface of the main body of the device becomes dirty, wipe it gently with a soft cloth soaked in neutral detergent diluted with water.
AC adaptor	If the surface becomes dirty, wipe it lightly with a soft cloth soaked in a neutral detergent diluted with water. Do not use until it is completely dry.

7.2 Inspection

Regular maintenance and inspections will help prevent malfunctions and accidents and ensure safe use of the unit. Although it depends on the frequency and duration of use, periodic inspections are recommended to maintain performance. Please contact us if you find any of the following abnormalities or malfunctions.



Turn off the power switch and remove the power cable before inspecting the main unit.

Main unit	Visually inspect the main unit for damage, deformation, or inlet corrosion.	
Power cable	Visually check there is no damage, deformation or insulation coating which is peeled off or damaged.	

7.3 Maintenance / repair

Our products come with a repair service period of 7 years from the date of delivery. Therefore, if you wish to have your product repaired, you will need to request it within this period. However, please note that we generally do not accept repair requests for products that have been in use for more than 7 years.

Furthermore, we store parts for discontinued products for a duration of 7 years after production has ceased. Please be aware that even within the repair service period, there may be cases where repair is not possible due to a lack of available parts.

We have full confidence in the quality of our products and provide them to our customers with the assurance that they can use them with peace of mind. However, depending on the usage environment and methods of use, malfunctions or defects may occur. In such cases, we recommend that you request repairs within the repair service period.

If any abnormality or failure occurs while using the unit according to this instruction manual, or if you notice any problem during your maintenance/inspection work, please contact us after checking it according to the relevant [Troubleshooting] item.

If repair is required, please contact us or our distributor in advance and send the unit back to us or our distributor.

In the case of on-site repair, a travel fee will be charged in addition to the repair cost.

7.4 Warranty

ATTO Corporation warrants all of its products under the following terms and conditions.

- 1. This warranty covers all new products that are sold by ATTO Corporation (hereinafter called ATTO).
- 2. Expendable items are not covered by this agreement.
- 3. Claims under this warranty are limited to defects in material and workmanship of the products.
- 4. Malfunction and/or damage due to neglect, abuse, operation or repair contrary to specifications and/or instructions presented by ATTO are not warranted.
- 5. ATTO shall not be liable to consequential damage, labor, loss or expense directly or indirectly arising from use of the products.
- 6. Damage due to transit is not covered by this warranty.
- 7. The warranty period is one (1) calendar year from a date when the products are shipped from ATTO to an original purchaser.
- 8. This warranty is not applied to any defect that is reported to ATTO later than one (1) calendar month from a date of warranty termination.
- 9. ATTO Shall supply parts to replace faulty parts of defective products under this warranty, free of charge.
- 10. ATTO shall repair defective products under this warranty, which cannot be repaired at field, free of charge.
- 11. ATTO shall replace defective products under this warranty, which cannot be repaired, free of charge.
- 12. Freight charges for return and replacement shipments under this warranty are shared by ATTO and a purchaser, that is one way by either party and another way by another party.
- 13. Warranty period of repaired products and replacement products or parts is three (3) calendar months from a date when the said products or parts are shipped from ATTO, or a remaining term of an original warranty period of the defective products, whichever lasts longer.
- 14. Return of the products for credit or refund is not accepted unless otherwise agreed in writing by ATTO.

8. Specifications

Product name	MyMiniBLOCK C&H			
Model	WSC-2615			
Temp. setting	0°C -100°C (Note that the temperature can be set from -10°C to 100°C. Settings below 0°C are not recommended, as they are easily affected by the method of use and ambient temperature. Note that the cooling capacity is -20°C below the ambient temperature.)			
Timer	1-999 sec. or 1~999 min.			
Setting accuracy	100°C± 0.5°C / 40°C± 0.3°C			
Temp. display	0.1℃			
Heating / Cooling time	\leq 15min(20°C \rightarrow 100°C) / \leq 30min(20°C \rightarrow 0°C)			
Input voltage/ power consumption	DC24V / 60W			
Power	Input:100 - 240V Output: DC24V 72W			
Dimensions	123 (W) × 165 (D) × 115 (H) mm			
Weight	Main unit 1.2kg			

^{*}Temperature accuracy is calculated based on the actual temperature of liquid in a microtube filled with mineral oil using a block for 1.5mL or 2.0mL microtubes. Both temperature setting accuracy and hole-to-hole error are $\leq \pm 0.5$ °C. Please note that the accuracy may vary depending on the solution, container, block, etc. used.

9 Option

Please specify the code number and ask our distributor for the latest pricing when ordering.

	Block for WSC-2615	Code No.	Hole shape (mm)	
BIOCK IOI WSC-2015		Code No.	Inside diameter	Depth
Α	Block for 40pcs x 0.2mL Micro Tube, WSC-2610/15	4002640	6.1	17
В	Block for 24pcs x 0.5mL Micro Tube, WSC-2610/15	4002641	7.9	27
С	Block for 15pcs x 1.5mL Micro Tube, WSC-2610/15	4002642	10.8	30
D	Block for 15pcs x 2.0mL Micro Tube, WSC-2610/15	4002643	10.8	30
Е	Block for 8x12.5x12.5x32mm Cubic Cell, WSC-2610/15	4002644	13 × 13	32
F	Block for 4pcs x 15mL Centrifuge Tube, WSC-2610/15	4002645	16.9	80
G	Block for 2pcs x 50mL Centrifuge Tube, WSC-2610/15	4002646	29	80

^{*4} x 15mL block for C.T. (4002645) and 2 x 50mL block for C.T. (4002646) can be filled with water in the tube holes of the aluminum block to improve thermal conductivity. 4 x 15mL block for centrifugal tubes can be filled with about 1-3mL of water, 2 x 50mL block for centrifugal tubes can be filled with about 5-15 mL of water. After use, please discard the water and dry.

^{*}If water overflows, wipe it off immediately.

^{*}If the device is flooded with water, stop using it immediately and contact us.



ATTO Corporation

Head Office:

3-2-2 Motoasakusa, Taito-ku, Tokyo 111-0041, JAPAN

TEL: +81-3-5827-6863 FAX: +81-3-5827-6647 E-mail: eig@atto.co.jp

Website: http://www.atto.co.jp/eng/