

## USER MANUAL

# Peltier+

Works with

**OneLab** 

design & execute



## Safety instructions



### Do not touch moving parts during operation!

The user must never put their fingers or any objects in the fans of the device.

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### Risk of burns!

Exercise caution when touching the housing parts and the heating plate. The heating plate can reach temperatures in excess of 99°C. Pay attention to the residual heat after switching off. The device may only be transported when cold!

Do not cover the heating surface with anything **except compatible labware**.

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- The device must always be completely switched off (cables removed) before moving it.
- The device must be handled with caution as it contains moving parts.
- The user must maintain a distance of at least 20cm from the product (WiFi antenna) while it is being installed and operated.
- The device is intended for indoor use only.
- Device maintenance has to be done exclusively by an Andrew Alliance representative.
- If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.
- All the input/output ports are Safety Extra Low Voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits.

## About this manual

Read the user manual before using this device. Strictly follow usage and maintenance instructions provided in the manual. It is the user's responsibility to become familiar with all available information concerning the correct use, care and limitations of these products. If you are uncertain about the correct use or limitations of the products, contact Andrew Alliance service and support. The manufacturer, the distributor and their respective owners, employees, agents and representatives are not responsible or liable for errors or omissions.

Information in this User Manual is subject to change without notice and does not represent a commitment on the part of Andrew Alliance. Andrew Alliance assumes no responsibility for any inaccuracies that may be contained in this User Manual. Andrew Alliance makes no commitment to update or keep current the information in this User Manual, and reserves the right to make improvements to this User Manual and/or to the products described in this User Manual, at any time without notice.

If you find information in this manual that is incorrect, misleading, or incomplete, we would appreciate your comments and suggestions.



# Getting started

## Before you begin

If you do not have a OneLab account, please create one by going to: <https://onelab.andrewalliance.com/signup>

1

### Plug your Peltier+ into a power source.

The device will automatically start up.

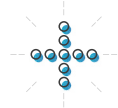


Only use the provided AC/DC power supply unit and cords.

2

### Wait for the LED indicator to turn blue and blink.

After a couple of minutes, the Peltier+ will inform you when it is in installation mode.



If the Peltier+ doesn't automatically enter installation mode, press the power button 5 times.

3

### Connect your computer, tablet or smartphone to the Peltier+.

#### A. Go to your Wi-Fi settings

and select the network named **Peltier-5xx.4xxx.xxxxx**

xxxx.xxxxx is the Peltier+ device serial number (you can find it on top of your device)



If you do not have access to a Wi-Fi compatible device, please refer to our online help: [help.andrewalliance.com](http://help.andrewalliance.com)



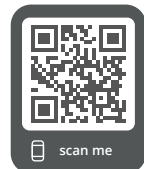
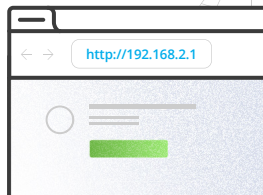
B. The LED indicator will stop blinking when it's successfully connected.

4

### Launch a web browser, type <http://192.168.2.1> and follow the on-screen steps to continue installation.



Please note that the installation page might open automatically.



Feel free to contact the Andrew Alliance support team



Chat with our support team directly in OneLab



Send us an email to [aa\\_support@waters.com](mailto:aa_support@waters.com)  
We reply within 1 business day

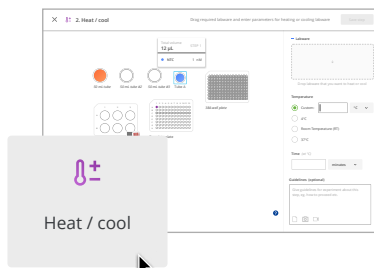
## Operations

### Design your protocol

Our drag-n-drop editor makes it **easy to design a precise and complete protocol** with all that you need to run your experiment perfectly.



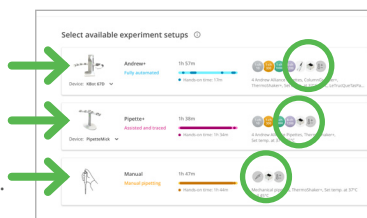
Create an **Heat / cool** action by clicking on this menu, which is located in the left of the screen.



### Execute experiment with Peltier+

**OneLab** will automatically select your **Peltier+** and allows you to use it with every available experiment set-up, either manual, semi-automated or fully automated operation.

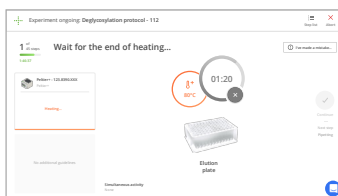
Choose your desired experiment setup and then **prepare all the required materials**.



### Start the experiment and let OneLab control your device

Follow the **visual instructions** based on the protocol being used and you will **be guided through your experiment**.

Each step of the experiment will be recorded and available in OneLab.



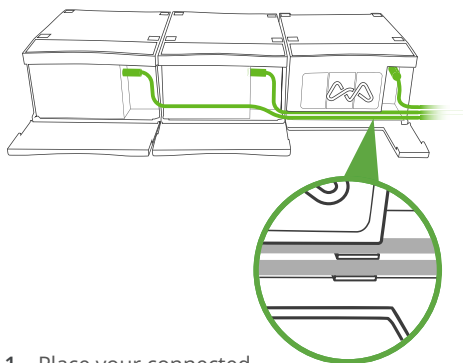
## Technical data

Labware compatible	Check the OneLab Domino Catalog at <a href="http://andrewalliance.com/domino-catalog">andrewalliance.com/domino-catalog</a>
Maximal heating temperature	99°C*
Minimal cooling temperature	0°C*
Heating rate	14°C/min*
Cooling rate	9°C/min*
Relative humidity	80% at 37°C
Maximum operating altitude	2000 m
Environment temperature operating range	+4°C to +37°C
User interface	Through OneLab software
Ingress protection	IP20**
Dimensions (W x L x H)	170 x 162 x 100 mm (The specified dimensions are subject to change according to the labware)
Weight	1.50 kg
External power supply	Input 100-240 VAC, 1.4 A / output 24 VDC, 5 A, 120 W
Power or current rating	5 A
Overvoltage category DC port	Cat I
Operating voltage	24 VDC
Network connectivity	• Gigabit Ethernet • Wi-Fi 2.4 GHz and 5 GHz
Pollution degree of the intended environment	Pollution degree 2
Cleaning	Only with a wet tissue or isopropanol
Warranty	1 year
Certification	CE, FCC, RoHS, WEEE

\*Tested with 96-well PCR plate, skirted, LoBind, Eppendorf (0030129555) at room temperature of 26°C.

\*\*Avoid spilling liquid on the device.

## Multiple connected devices installation



1. Place your connected devices as indicated by OneLab.
2. Open the hatches.
3. Plug the power cables into your devices power socket.
4. Pass the cables in front of devices and then insert them into the dedicated path.
5. Close the hatches.

## Operating device

### Power on



When the device is in standby mode (plugged to power source but turned off), **press the power button to turn on** the device.

Note: The device will automatically start up when you plug it to a power source.

### Power off



When the device is in its idle state (no experiment running), **press the power button for 5 seconds to turn off** the device.

## Unit end of life



When a unit reaches the end of its useful life, contact Andrew Alliance for directions and information on the end-of-life policy.

This is in accordance with the European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

## Certifications

### Electrical safety

- I. IEC 61010-1: 2010
- II. IEC 61010-1/A1: 2016
- III. UL 61010-1:2012
- IV. CAN/CSA 22.2#61010-1-12

### EMC

- I. EN 61326-1: 2013
- II. EN 301 489-1 V2.2.0
- III. EN 301 489-17 V3.1.0

### RADIO

- I. EN 300 328 Ver 2.1.1
- II. EN 301 893 V2.1.1

### FCC

- I. FCC 47 CFR part 15 subpart B section 15.107 (b) and section 15.109 (b and g) Class A all over other device tested per ANSI C63.4 (Ed. 2014) procedures
- II. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### RoHS

RoHS 3 (EU) 2015/863

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