

USER MANUAL

Vacuum+





Safety instructions



- The device must always be completely switched off (cables removed) before moving it.
- 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.

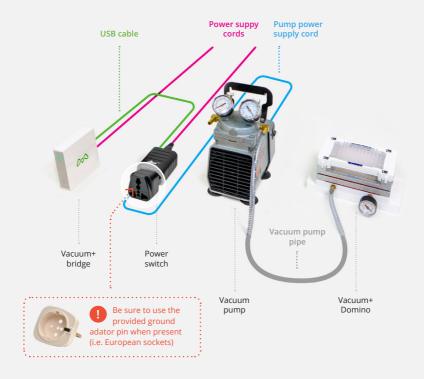
About this manual

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.

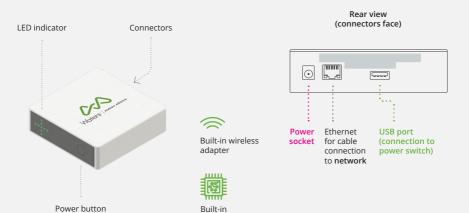
Information in this User Manual is subject to change without notice and does not represent a commitment on the part of Andrew Alliance. Andrew Alliance assumes no responsibility for any inaccuracies that may be contained in this User Manual. Andrew Alliance makes no commitment to update or keep current 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.

Product overview



Vacuum+ bridge



computer

Getting started

A. Installation

Place the *vacuum pump* on the floor or on a workbench other than the one being used for your experimental set-up.

When the pump is ON it could generate vibrations, which may influence experiment setup if placed on the same workbench.

- Plug pipe between vacuum Domino and vacuum pump.
 - Verify the absence of tension in the pipe.
- On the vacuum pump body, turn the switch ON.
- Connect the *power switch* to the *bridge* USB port.
- Connect the *vacuum pump* power cord to the *power switch* A/C output port.

 Be sure to use the provided ground adator pin when present (i.e. European sockets).
- 6 Plug the *power switch* power cord to a power source.
- Make sure the specially designed shims are placed on the bottom of the *vacuum Domino*.



- Additional instructions
 - Check the performances of *vacuum Domino* when the μ Elution[™] plate is present.The vacuum should be between **2.5–4 Hg**. If not, you may need to adjust the pump accordingly.

Note: For this step the pump must be powered directly from the wall (not through the power switch).

• At the beginning of the experiment, a waste consumable must be placed inside the *vacuum Domino*, beneath the $\mu Elution^{TM}$ plate.

B. Connection to OneLab

Before you begin

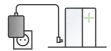
If you do not have a OneLab account, please create one by going to: https://onelab.andrewalliance.com/signup

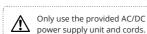
Plug your the *Vacuum+ bridge* into a power source.



Wait for the LED indicator to turn blue and blink.

The device will automatically start up.





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





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

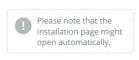
- Connect your computer, tablet or smartphone to the Vacuum+ bridge.
 - A. Go to your Wi-Fi settings and select the network named Vacuum-5xx.6xxx.xxxxx

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





- B. The LED indicator will stop blinking when it's successfully connected.
- Launch a web browser, type http://192.168.2.1 and follow the on-screen steps to continue installation.







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 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.



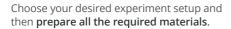
Create an Apply negative/positive pressure action by clicking on this menu, which is located in the left of the screen.





Execute experiment with Vacuum+

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





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 Onel ab.



Technical data

Vacuum+ domino

Labware compatible	Check the OneLab Domino Catalog at andrewalliance.com/ domino-catalog
Vacuum+ manifold	Based on Waters Extraction Plate Manifold for Oasis 96-Well Plates (186001831)
Dimensions of Vacuum+ domino (W x L x H)	228.8 x 127 x 100 mm
Weight of Vacuum+ domino	1.81 kg
Kit compatible	Waters GlycoWorks Ra- piFluor-MS N-Glycan Kit 96 (176003635)
Vacuum pump requirements	Vacuum pump rated for at least 25 – 30 inHg

Vacuum+ bridge

Control connectivity Relative humidity Relative humidity 80% at 37°C Maximum operating altitude Environment temperature operating range User interface Through OneLab software Ingress protection IP20* Dimensions (W x L x H) Weight 0.30 kg External power supply Input 100-240 VAC, 1.4 A / output 24 VDC, 5 A, 120 W Power or current rating Overvoltage category DC port Operating voltage Very Cat I Operating voltage 24 VDC Network connectivity • Gigabit Ethernet • Wi-Fi 2.4 GHz and 5 GHz Pollution degree of the intended environment Cleaning Only with a wet tissue or isopropanol Warranty 1 year	vacaam briage	
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isopropanol	of the intended	Pollution degree 2
Warranty 1 year	Cleaning	
	Warranty	1 year
Certification CE, FCC, RoHS, WEEE	Certification	CE, FCC, RoHS, WEEE

^{*}Avoid spilling liquid on the device.

Operating Vacuum+ bridge

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.

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

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).

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