bluelab®
success by simplicity

bluelab® powerpod

guarantee.

2 year LIMITED PRODUCT GUARANTEE WITH PROOF OF PURCHASE

The Bluelab® Powerpod™ comes with a 2 year limited written guarantee. Proof of purchase required.

lets talk.

If you need assistance or advice - we're here to help you.

North America Ph: **909 599 1940**   NZ Ph: **+64 7 578 0849**

Fax: **+64 7 578 0847**   Email: **support@bluelab.com**

get online.

Looking for specifications or technical advice?
Visit us online at **bluelab.com**

post.

Bluelab® Corporation Limited
8 Whiore Avenue, Tauriko Business Estate
Tauranga 3110, New Zealand

Instruction Manual English POWERPOD_V01_23082016
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bluelab powerpod INPUT/OUTPUT: 100/240VAC, 50/60Hz, 8.5A max. total load

pH   Nutrient A   Nutrient B   Temperature

2 year LIMITED PRODUCT GUARANTEE WITH PROOF OF PURCHASE

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CE FC

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→ PLEASE FOLLOW THE MANUAL STEP BY STEP BEFORE FIRST USE

Contents

Notes / record your system set up here

Bluelab® limited warranty

Bluelab® Corporation Limited (Bluelab) provides a warranty on its products (Bluelab® Powepod™) under the following terms and conditions:

LIMITED PRODUCT GUARANTEE
2 year WITH PROOF OF PURCHASE

How Long Does Coverage Last?

Bluelab® warrants the Bluelab® Powepod™ (Product) for a period of 24-months from date of purchase by original purchaser or consumer. Proof of purchase, to Bluelab's sole satisfaction, is required for the warranty to be effective (store sales receipt for Product showing model number, payment and date of purchase). This warranty is non-transferable and terminates if the original purchaser/consumer sells or transfers the Product a third party.

What is Covered?

Bluelab® warrants the Product against defects in material and workmanship when used in a normal manner, in accordance with Bluelab® instruction manuals. If Bluelab® is provided with valid proof of purchase (as defined above) and determines the Product is defective, Bluelab® may, in its sole discretion either (a) repair the Product with new or refurbished parts, or (b) replace the Product with a new or refurbished Product.

Any part or Product that is replaced by Bluelab® shall become its property. Further, if a replacement part or Product is no longer available or is no longer being manufactured, Bluelab® may at its sole discretion replace it with a functionally-equivalent replacement part or product, as an accommodation in full satisfaction of the warranty.

What is NOT covered?

This warranty does not apply to equipment, component or part that was not manufactured or sold by Bluelab®, and shall be void if any such item is installed on a Product. Further, this warranty does not apply to replacement of items subject to normal use, wear and tear and expressly excludes:

- Cosmetic damage such as stains, scratches and dents
- Damage due to accident, improper use, negligence, neglect and careless operation or handling of Product not in accordance with Bluelab® instruction manuals, or failure to maintain or care for Product as recommended by Bluelab®
- Damage caused by use of parts not assembled/installed as per Bluelab® instructions
- Damage caused by use of parts or accessories not produced or recommended by Bluelab®
- Damage due to transportation or shipment of Product
- Product repaired or altered by parties other than Bluelab® or its authorised agents
- Product with defaced, missing or illegible serial numbers
- Products not purchased from Bluelab® or a Bluelab®-authorised distributor or reseller.

How Do You Get Service?

To begin a warranty claim you must return the Product to the point of purchase with valid proof of purchase (as defined above). In California, you can also return the Product to any Bluelab-authorised distributor or reseller, with valid proof of purchase.

Limitation of Liability & Acknowledgments

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET OUT ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES AND REMEDIES (ORAL OR WRITTEN, EXPRESS OR IMPLIED).

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, BLUELAB IS NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGES, OR ANY OTHER LOSS OR DAMAGES RESULTING FROM SALE OR USE OF THE PRODUCT, OR BREACH OF WARRANTY, HOWEVER CAUSED, INCLUDING DAMAGES FOR LOST PROFITS, PERSONAL INJURY OR PROPERTY DAMAGE.

IT IS UNDERSTOOD AND AGREED BY CONSUMER UPON PURCHASE OF A PRODUCT THAT, EXCEPT AS STATED IN THIS WARRANTY, BLUELAB IS NOT MAKING AND HAS NOT MADE ANY EXPRESS OR IMPLIED WARRANTY OR OTHER REPRESENTATION REGARDING THE PRODUCT, AND DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. ANY WARRANTIES WHICH ARE IMPOSED BY LAW AND CANNOT BE DISCLAIMED ARE HEREBY LIMITED IN DURATION TO THE PERIOD AND REMEDIES PROVIDED IN THIS WARRANTY.

SOME JURISDICTIONS (STATES OR COUNTRIES) DO NOT ALLOW EXCLUSION OR LIMITATION FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT BE APPLICABLE.

IF ANY PROVISION OF THIS WARRANTY IS JUDGED TO BE ILLEGAL, INVALID OR UNENFORCEABLE, THE REMAINING PROVISIONS OF THE WARRANTY SHALL REMAIN IN FULL FORCE AND EFFECT.

Governing Law; Authority

This warranty is governed by the laws of the state of country where Product is purchased, without regard to its choice of law principles. Except as allowed by law, Bluelab does not limit or exclude other rights a consumer may have with regard to the Product. No Bluelab distributor, employee or agent is authorised to modify, extend or otherwise change the terms of this warranty.

Register your guarantee online at bluelab.com

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1.0 Introduction & Overview

1.1 Introduction

The Bluelab® Powerpod™ is an electronically controlled mains switching box that is designed to activate mains powered equipment via control signals from a Bluelab® control device. The Bluelab® Powerpod™ is ideal for use when using a Bluelab® Pro Controller with third party mains powered pumps, heaters and coolers.

1.2 Features

|	
4 x IEC mains outputs (8.5A maximum total output load)	100V~-240V~, 50/60Hz compatible
Compatible with Bluelab® Pro Controller and some Bluelab® Dosetronic™ models[1]	Adds temperature control to Bluelab® Pro Controller and some Bluelab® Dosetronic™ models[1]
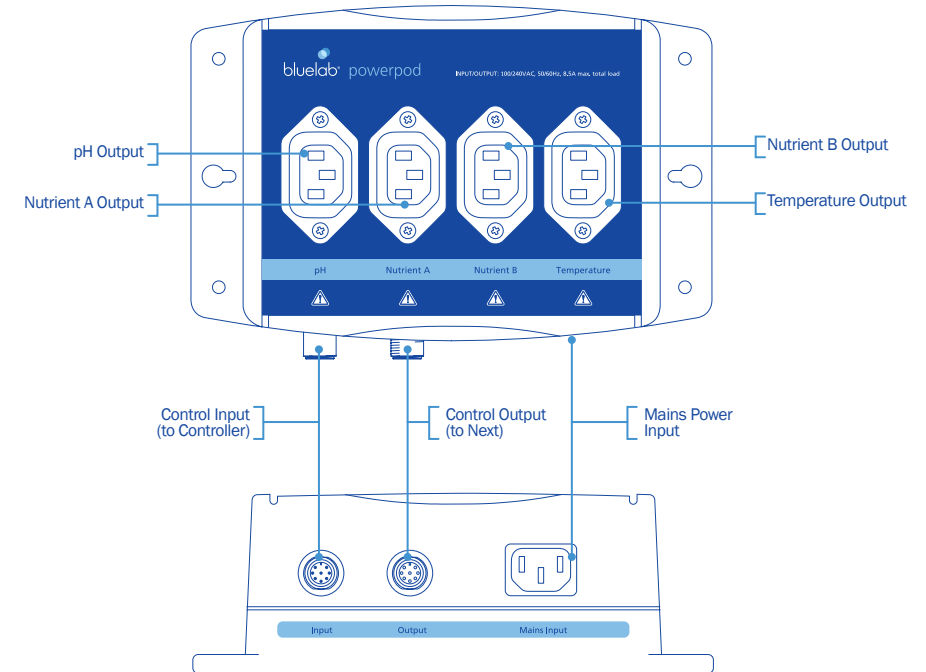
[1] Bluelab® Powerpod™ is compatible with most Bluelab® Dosetronic™ models manufactured after 2010, please check with Bluelab® Customer Support for more information.
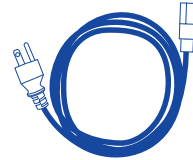
1.3 What's in the box?

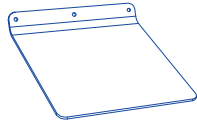Please check and verify the box contents match the below list:
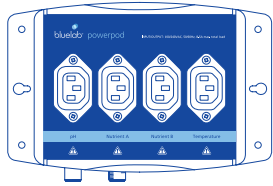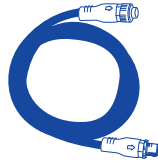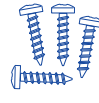

Bluelab® Powerpod™   Dosing cable   1x Mains INPUT power cord IEC C13 female type[2] (country specific supplied)

Water cover   4x Mains OUTPUT power cord IEC C14 male type[2] (country specific supplied)   4x mounting screws

[2] Actual product supplied may differ from the images above due to variation in the plugs required for the specific region the product is supplied to.

1.4 Product documentation

Documentation for this product consists of a printed user manual that is supplied with the product as well as being available electronically from the Bluelab® website: **bluelab.com**

This documentation contains the latest product safety information at the time of publication. The information in this documentation is subject to change. For the most up-to-date documentation please visit our website **bluelab.com**

Safety symbols used in this documentation & product labelling:

WARNING

1 **Warning**

Indicates a potentially hazardous situation which, if not avoided, could result in injury or death.

CAUTION

2 **Caution**

Indicates a potentially hazardous situation which, if not avoided, could result in damage to the product or equipment it is connected to.

3 **! symbol**

The '!' icon on the Bluelab® Powerpod™ indicates possible sources of electrical shocks and/or risk of danger. Refer to specific areas of this product manual for more information related to these sources.

5.0 Parts & Guarantee

Mains Cable Packs

Replacement mains cable packs are available with country specific fittings. Each pack contains 1x mains input cable and 4x mains output cables.

Bluelab® US Cable Pack
Part number: PPCNA

Bluelab® EU Cable Pack
Part number: PPCEU

Bluelab® UK Cable Pack
Part number: PPCUK

Bluelab® AUS/NZ Cable Pack
Part number: PPCNZ

PPCNA shown above

Dosing cable

Bluelab® Dosing cable
Part number: 500005

Fuse

Fuse can be replaced by ordering from Bluelab, or one of the suggested manufacturers:

Bluelab® Fuse
Part number: 660055
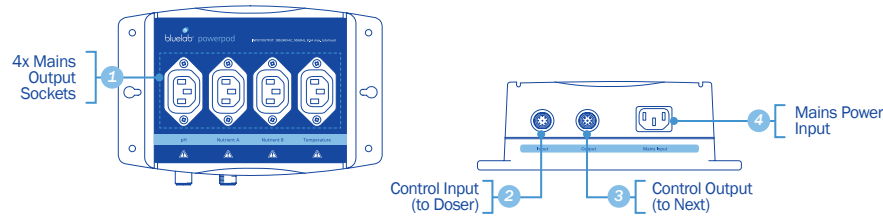
Manufacturer - Cooper Bussmann
Manufacturer part number: S505-10-R

Manufacturer - Littelfuse
Manufacturer part number: 0215010.MXP

4.3 Technical specifications

4x Mains Output Sockets ①

Control Input (to Doser) ②

Control Output (to Next) ③

Mains Power Input ④

① Bluelab® Powerpod™ output sockets

Type	IEC C13 female mains OUTPUT socket
Output voltage range	110 - 240 V~ (same as input voltage applied at 4)
Output frequency range	50 - 60 Hz (same as input voltage applied at 4)
Total rated load	8.5A (maximum total load for all sockets 1)

② Control input (to controller)

Type	M12 type connector in an 8 female pin configuration
Output voltage range	24 Vdc (maximum)
Output frequency range	n/a
Total rated load	20 mA (maximum)

③ Control output (to next)

Type	M12 type connector in an 8 male pin configuration
Output voltage range	24 V ac/dc (maximum)
Output frequency range	n/a
Total rated load	500mA (maximum)

④ Mains power input

Type	IEC C14 male mains INPUT socket
Output voltage range	110 – 240 V~
Output frequency range	50 – 60 Hz
Total rated load	8.5A (maximum)

Bluelab® Powerpod™ environmental

Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to +80°C
Operating Humidity	< 90% (Relative humidity: non-condensing)
Storage Humidity	< 95% (Relative humidity: non-condensing)
Enclosure Rating	Designed to meet IP43, when ALL the mains output plugs are in place. Water cover provided to give extra protection
Certifications	CE, FCC, IC, IEC 61010-1:2010

1.5 Safety information

The Bluelab® Powerpod™ has been designed and tested in accordance with the IEC 61010-1:2010 standard, and has been supplied as new, in a safe condition.

This manual contains information and warnings that must be observed to keep the Bluelab® Powerpod™ in a safe condition and ensure safe operation.

In order to use the Bluelab® Powerpod™ correctly and safely, read and follow the precautions below and follow all the safety instructions and/or warnings given throughout this manual that relate to the specific features of the Bluelab® Powerpod™. In addition, follow all generally accepted safety practices and procedures required when working with and around electricity.

✋ WARNING

To avoid possible electric shock, personal injury or death, read the following before installing and using the Bluelab® Powerpod™.

- Use the Bluelab® Powerpod™ only as specified in this manual or the protection provided by this product might be impaired.

- Inspect the Bluelab® Powerpod™ before using it. Do not use the Bluelab® Powerpod™ if it appears damaged.

- Inspect all connected cables before using the Bluelab® Powerpod™. Do not use them if any insulation is damaged or metal is exposed. Replace damaged cables before using the Bluelab® Powerpod™.

- Do not use this Bluelab® Powerpod™ if it operates abnormally. Protection may be impaired. If in doubt have the Bluelab® Powerpod™ serviced.

- Whenever it is likely that safety protection has been impaired, make the Bluelab® Powerpod™ inoperative and secure it against any unintended operation.

- Have the Bluelab® Powerpod™ serviced only by qualified service personnel.

- Do not apply more than the rated voltage, as marked on the product, between the power terminals or between any power terminal and earth ground.

- Always use the power cables that are appropriate for the voltage and outlet of the country or location in which the product is being used.

- Never remove or open the case of the Bluelab® Powerpod™ without first disconnecting the Bluelab® Powerpod™ from the main power source.

- Never operate the Bluelab® Powerpod™ with the case removed or open.

- Use only the replacement fuse specified by the product documentation.

- Never replace the fuse without first disconnecting the product from the mains power source.

- When servicing the Bluelab® Powerpod™, use only specified replacement parts.

2.0 Installing the Bluelab® Powerpod™

2.1 Mounting the Bluelab® Powerpod™

The Bluelab® Powerpod™ is designed to be mounted to a wall or solid mounting surface using the fasteners provided.

1 The Bluelab® Powerpod™ should be mounted in the direction indicated in this diagram.

Up

Down
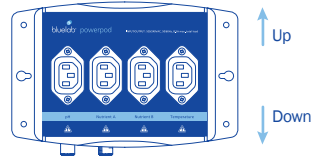
✋ WARNING

To avoid possible electric shock, personal injury or death, do NOT install this product while it is connected to a mains power supply.

⚠ CAUTION

To avoid possible damage to this product ensure that the factory provided water cover is installed correctly when in a damp environment.
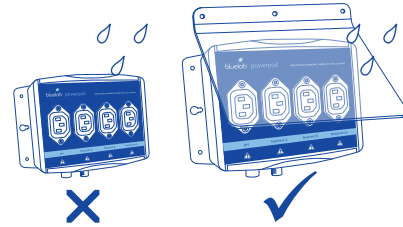
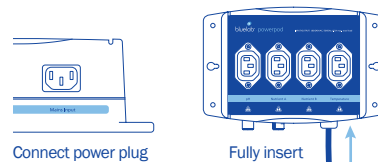2 Ensure that once mounted the mains input connector is able to be removed easily and that it is NOT obstructed.
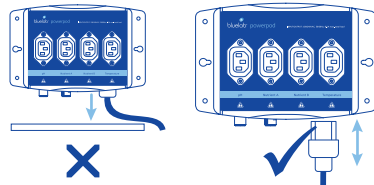
2.2 Connecting to a mains power source

✋ WARNING

To avoid possible electric shock, personal injury or death, connect the factory supplied three-conductor mains power cable to a properly grounded power outlet. It a two-conductor mains power cable is used, or if this Bluelab® Powerpod™ is connected to a non-grounded power outlet then ensure that the equipment connected to the Bluelab® Powerpod™ does not require a ground connection.

1 The mains power source is connected to this product by connecting the factory supplied three-conductor mains power cable to connector (IEC C13 female type) on the bottom side of the product.

Connect power plug   Fully insert

4.2 Frequently asked questions (FAQs)

QUESTION	ANSWER
What dosing pumps can I use with the Bluelab® Powerpod™?	Any 110-240 V~, 50-60Hz mains powered pump can be connected to the Bluelab® Powerpod™ as long as the total load for all 4 mains outputs is less than 8.5 Amps. **NOTE: voltage specification of connected pumps MUST be the same as the voltage applied to the mains input connector.**
What dosing controller can I use with the Bluelab® Powerpod™?	The Bluelab® Powerpod™ is compatible with the Bluelab® Pro Controller and some Bluelab® Dosetronic™s[4].
Why would I want to use the Bluelab® Powerpod™ when I already have a Bluelab® Peridoser™, Bluelab® Solenoid kit, or Bluelab® Peripod™?	Connecting a Bluelab® Powerpod™ to a Bluelab® Pro Controller that already has dosing pumps will add the ability to control reservoir temperature. This can be done by plugging either a mains powered tank heater or chiller to the Temperature output connector of the Bluelab® Powerpod™.
Can I use a Bluelab® Peridoser™ with the Bluelab® Powerpod™?	Yes, plug the Bluelab® Powerpod™ directly into the Bluelab® Pro Controller (or Bluelab® Dosetronic™[4]) and then plug the Bluelab® Peridoser™ into the control output plug on the Bluelab® Powerpod™.
Can I use a Bluelab® Solenoid kit with the Bluelab® Powerpod™?	Yes, plug the Bluelab® Powerpod™ directly into the Bluelab® Pro Controller (or Bluelab® Dosetronic™[4]) and then plug the Bluelab® Solenoid kit into the control output plug on the Bluelab® Powerpod™.
Can I use a Bluelab® Peripod™ with the Bluelab® Powerpod™?	Yes, plug the Bluelab® Powerpod™ directly into the Bluelab® Pro Controller (or Bluelab® Dosetronic™[4]) and then plug the Bluelab® Peripod™ into the control output plug on the Bluelab® Powerpod™[5].

[4] Bluelab® Powerpod™ is compatible with most Bluelab® Dosetronic™s manufactured after 2010, please check with Bluelab® Customer Support for more information.

[5] When connecting a Bluelab® Powerpod™ and Bluelab® Peripod™ to the same Bluelab® Pro Controller, dose ratios are not currently supported. Please contact Bluelab® Customer Support for more information.

4.0 Troubleshooting & Specifications

4.1 Troubleshooting guide

🖐 **WARNING**

> To avoid possible electric shock, personal injury or death, disconnect the Bluelab® Powerpod™ from the mains power source before performing any maintenance.

TROUBLE	REASON	CORRECTION
Connected equipment is not dosing as I expect	Connectors are not fully inserted.	Check that all connectors are fully inserted into the correct positions.
	Connectors and/or cables are damaged.	Inspect the connected cables for signs of damage. Replace as required.
	Connected equipment is faulty.	Undergo checks to ensure that all connected equipment is operating correctly and safely, as specified by the manufacturer of that specific equipment.
	Bluelab® Powerpod™ internal fuse is faulty.	Inspect and replace fuse as required (see section 5.0).
	Bluelab® Powerpod™ is faulty.	Return or replace Bluelab® Powerpod™.
My 'next' dosing device is not operating as I expect.	Connectors are not fully inserted.	Check that all connectors are fully inserted into the correct positions.
	Connectors and/or cables are damaged.	Inspect the connected cables for signs of damage. Replace as required.
	Connected equipment is faulty.	Undergo checks to ensure that all connected equipment is operating correctly and safely.
	Bluelab® Powerpod™ is plugged into OUTPUT connector of Bluelab® Peripod™.	Swap order - plug Bluelab® Peripod™ into OUTPUT connector of Bluelab® Powerpod™. Put Bluelab® Peripod™'s after the Bluelab® Powerpod™.
	Bluelab® Powerpod™ is faulty.	Return or replace Bluelab® Powerpod™.

2.3 Connecting to external equipment

This product is designed to activate mains powered equipment such as pumps, heaters, and coolers via inputs from a Bluelab® control device.

🖐 **WARNING**

> To avoid possible electric shock, personal injury or death, only use the factory supplied cables to connect to external devices.

⚠ **CAUTION**

> To avoid possible damage to the Bluelab® Powerpod™ ensure that the total maximum load of the connected external equipment is not more that 8.5 Amps.

1. Connect external equipment into one or all four of the power sockets on the Bluelab® Powerpod™.

Connect mains output power cables here
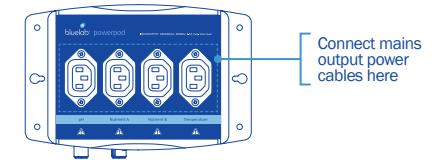
2. Connect the dosing cable into the Input connector on the underside of the Bluelab® Powerpod™. Push and screw the collar fully into the connector. This cable will connect to the Bluelab® Pro Controller or some Bluelab® Dosetronic's[3].
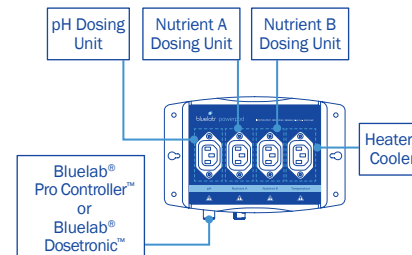

Line up pins   Push & screw
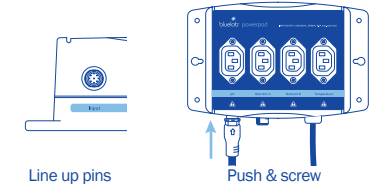
3. Connect a Bluelab doser or another Bluelab® Powerpod™ into the Output connector as shown on the underside of the Bluelab® Powerpod™. Push and screw the collar fully into the connector.


Line up pins   Push & screw
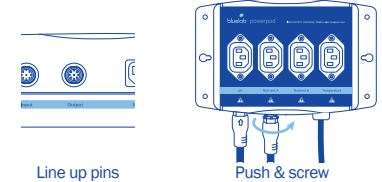
Examples of how to set up the Bluelab® Powerpod™ are illustrated below.

Ⓐ How to connect other dosing units:

pH Dosing Unit   Nutrient A Dosing Unit   Nutrient B Dosing Unit
Bluelab® Pro Controller or Bluelab® Dosetronic™
Heater/ Cooler

Ⓑ How to connect a Bluelab® Peridoser™ unit:

Bluelab® Pro Controller or Bluelab® Dosetronic™
Heater/ Cooler
Bluelab® Peridoser
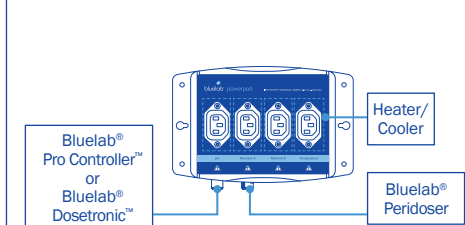
[3] Bluelab® Powerpod™ is compatible with most Bluelab® Dosetronic™'s manufactured after 2010, please check with Bluelab® Customer Support for more information.

3.0 Equipment Maintenance & Cleaning

### 3.1 Cleaning & equipment check

🤚 **WARNING**

> **To avoid possible electric shock, personal injury or death, read the following before attempting any maintenance or cleaning:**
>
> • Disconnect the Bluelab® Powerpod™ from the mains power source before carrying out any maintenance or cleaning.
>
> • Maintenance on the Bluelab® Powerpod™ should only be caried out by approved personnel.
>
> • Under no circumstance should the Bluelab® Powerpod™ be modified.
>
> • The Bluelab® Powerpod™ should only be opened to replace the internal fuse.
>
> • Never get water inside this product.
>
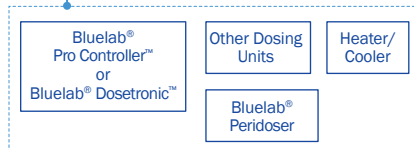> • Only use factory supplied mains cables, replacements can be purchased from **bluelab.com**

1 If the Bluelab® Powerpod™ requires cleaning, wipe it with a cloth that is lightly dampened with water or a mild detergent. Do NOT use solvents.
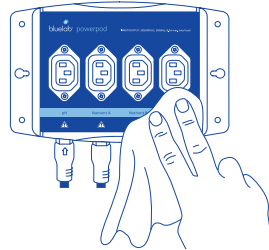
2 Regularly inspect the connected cables for signs of damage. Do not use them if any insulation is damaged or metal is exposed. Replace damaged cables before using the product.
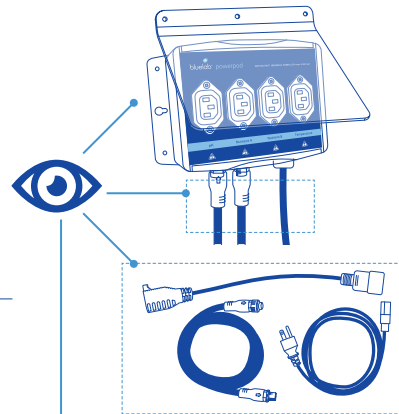
3 Connected equipment should undergo separate maintenance to ensure that it is safe to use as specified by the manufacturer of the equipment.

Bluelab® Pro Controller™ or Bluelab® Dosetronic™

Other Dosing Units

Heater/ Cooler

Bluelab® Peridoser

## 3.2 Replacing a faulty fuse

🤚 **WARNING**

> To avoid possible electric shock, personal injury or death, in the event that the internal fuse needs replacing, first check the external equipment, Bluelab® Powerpod™ cabling and connectors for signs of damage or electrical faults, and repair/replace as required before replacing the internal fuse.

To replace the internal fuse the Bluelab® Powerpod™ must be partially disassembled by following the steps below.
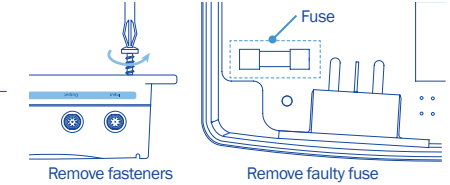
🤚 **WARNING**

> To avoid possible electric shock, personal injury or death, disconnect the product from mains power before disassembling this product.

1 Disconnect Bluelab® Powerpod™ from the mains power source and then disconnect any other cables.
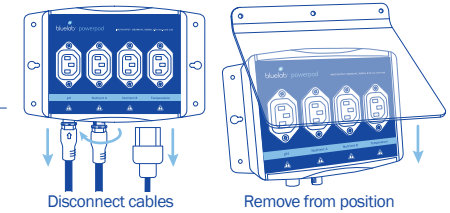
2 Remove Bluelab® Powerpod™ from its mounted position.

Disconnect cables   Remove from position

3 Remove 4x fasteners from the back of the Bluelab® Powerpod™.

4 Open the Bluelab® Powerpod™ case. Carefully remove the faulty fuse.

Fuse

Remove fasteners   Remove faulty fuse
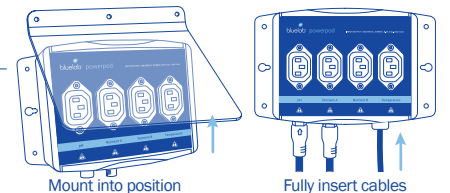
5 Replace faulty fuse with a new fuse.

🤚 **WARNING**

> To avoid possible electric shock, personal injury or death, ensure the replacement fuse has a current rating of 10A, and meets the testing standards required for IEC 61010-1:2010.

New fuse
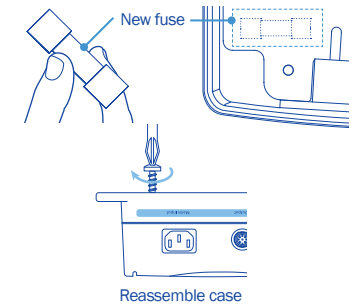
See Section 5.0 for the list spare parts and more information.

Reassemble case

6 Reassemble case and mount Bluelab® Powerpod™ back into position.

7 Re-connect all required cabling to the Bluelab® Powerpod™, and re-connect to the mains power source.

Mount into position   Fully insert cables

🤚 **WARNING**

> To avoid possible electric shock, personal injury or death, ensure the replacement fuse is installed correctly, the case is properly reassembled, that all fasteners are tightened firmly and the Bluelab® Powerpod™ is mounted back in place before reconnecting to mains power source.