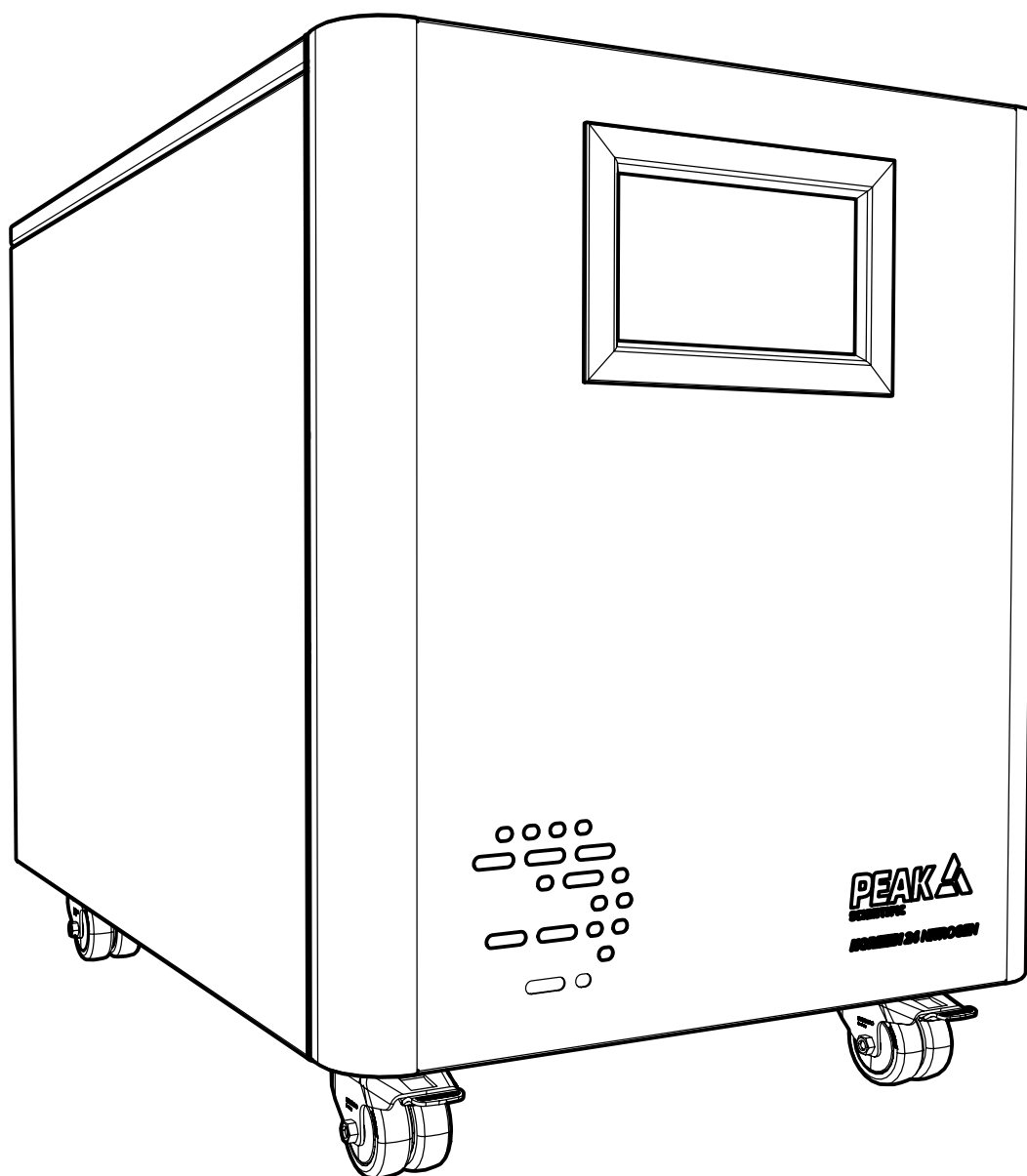


Horizen 24

Installation Guide



**Register product to operate at
www.peakscientific.com/activate**

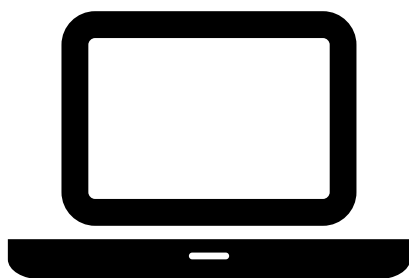


Register Product to Operate

To begin operation of your unit you will need to register your generator. You can do so by **visiting www.peakscientific.com/activate** or by **downloading the Peak Gas App**.



Registering will activate your **2 year warranty*** - covering every single component in your generator.



The screenshot shows a web form titled 'PEAK' with the following fields: 'Serial number' (with a dropdown for 'Generate Serial Number'), 'Production date', 'Contact details' (including 'First name', 'Last name', 'Email address', and 'Phone').



The screenshot shows a mobile app form titled 'Your Details' with the following fields: 'First name', 'Last name', 'Email address' (with a note 'Your email must be a valid email address'), 'Phone number', 'Address', and 'City'.

Important!

You must register your generator before nitrogen generation can commence. In order to be eligible for warranty your generator must be registered to the end user (not a reseller or distributor) and must have an annual preventative maintenance arranged within 12 months of the installation date & carried out by a Peak approved Field Service Engineer. Once registered the warranty will be honoured for a period of 24 months.**

* 2nd year warranty subject to completion of preventative maintenance visit arranged within 12 months of installation. For terms and conditions please visit www.peakscientific.com/warranty-statement/

** Call out and labour charges may apply where generator was not purchased directly from Peak

Change History

Rev	Comment	Name	Date
1	Initial Release	L. Couttie	22/06/2023
2	Installation Process Update	L. Couttie	13/09/2023
3	Content Updates	L. Couttie	05/02/2024

How to use this Manual

This installation guide is intended to be used as a step by step, quick start guide, to facilitate installation and configuration.

Please visit www.peakscientific.com/downloads to download the full User Manual for your gas generator.




Thank you for selecting Peak Scientific to meet your Gas Generation needs, and should you require any further assistance or support please do not hesitate to contact Peak Scientific or Peak Partner from which you purchased your Generator.

Safety Notices

Peak Scientific Instruments cannot anticipate every possible circumstance which may represent a potential hazard. The warnings detailed within this document detail the most known potential hazards, but by definition cannot be all inclusive. If the user employs an operating procedure, item of equipment or a method of working which is not specifically recommended by Peak Scientific, the user must ensure that the equipment will not be damaged or become hazardous to persons or property.

Symbols

This document uses the following symbols to highlight specific areas important to the safe and proper use of the Generator

 WARNING	A WARNING notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause personal injury or in the worst case death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood or met.
 CAUTION	A CAUTION notice denotes a hazard. It calls attention to an operating procedure, process or similar, which if not correctly performed or adhered to, could cause damage to the Generator or the Application. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood or met.
	Caution, risk of electric shock. Ensure power to the Generator has been removed before proceeding.

Safety Notice to Users



These instructions must be read thoroughly and understood before installation and operation of your Peak Horizen 24 Generator. Use of the Generator in a manner not specified by Peak Scientific MAY impair the SAFETY provided by the equipment.

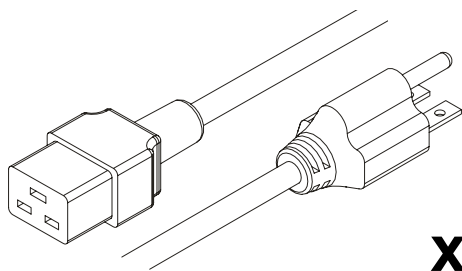


When handling, operating or carrying out any maintenance, personnel must employ safe engineering practices and observe all relevant local health and safety requirements and regulations. The attention of UK users is drawn to the Health and Safety at Work Act 1974, and the Institute of Electrical Engineers regulations.



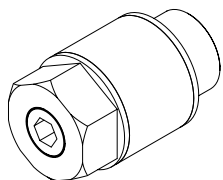
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Fittings Kit



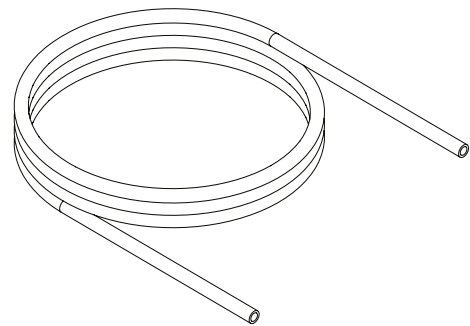
x1

US Mains Cable 240V C19 6-15 04-1024



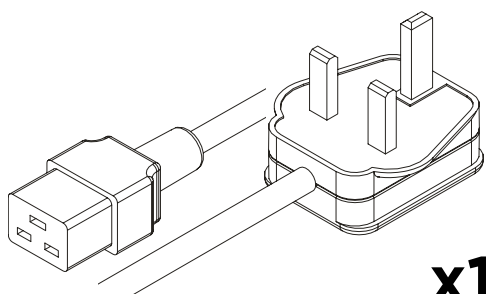
x1

Flow Control Silencer 02-1096



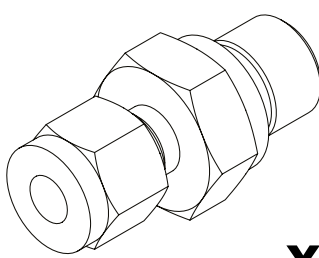
x3m

1/4" Teflon Tubing 00-1266



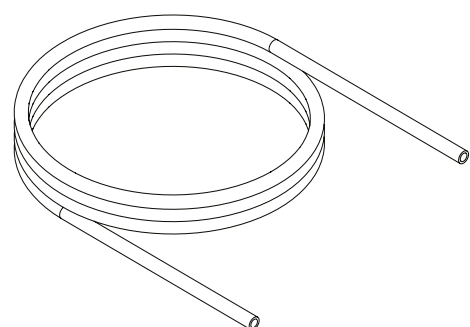
x1

UK Mains Cable C19 04-1025



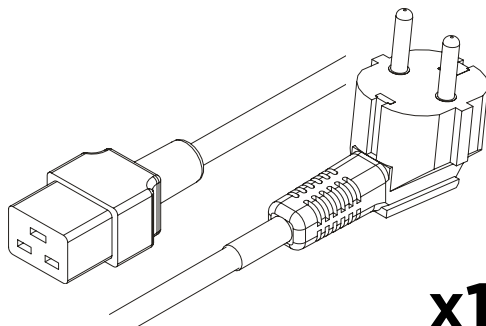
x1

1/4" Compression Fitting
02-4421



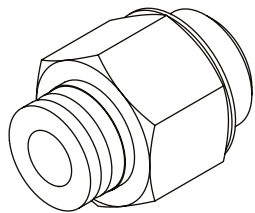
x3m

6mm PTFE Tubing 00-1302



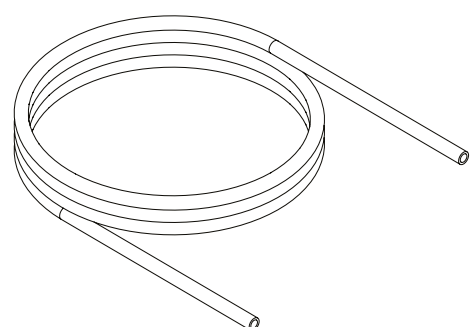
x1

EU Mains Cable C19 04-1026



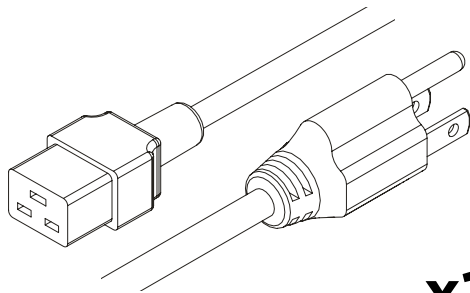
x2

6mm Push Fit Fitting
02-4600



x3m

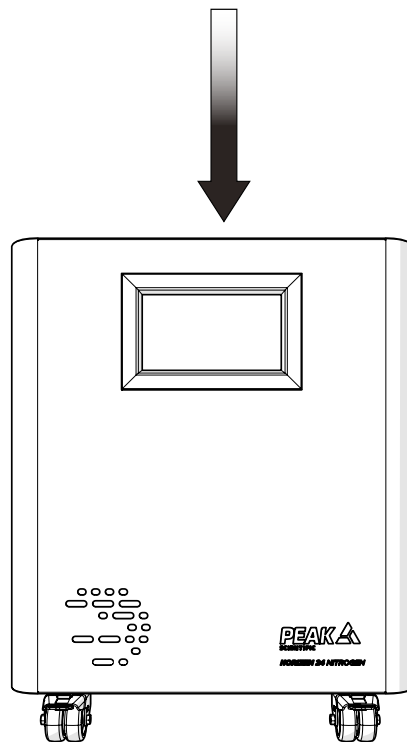
6mm PE Tubing 00-1282



x1

US Mains Cable 120V C19 5-15 04-1035

1.



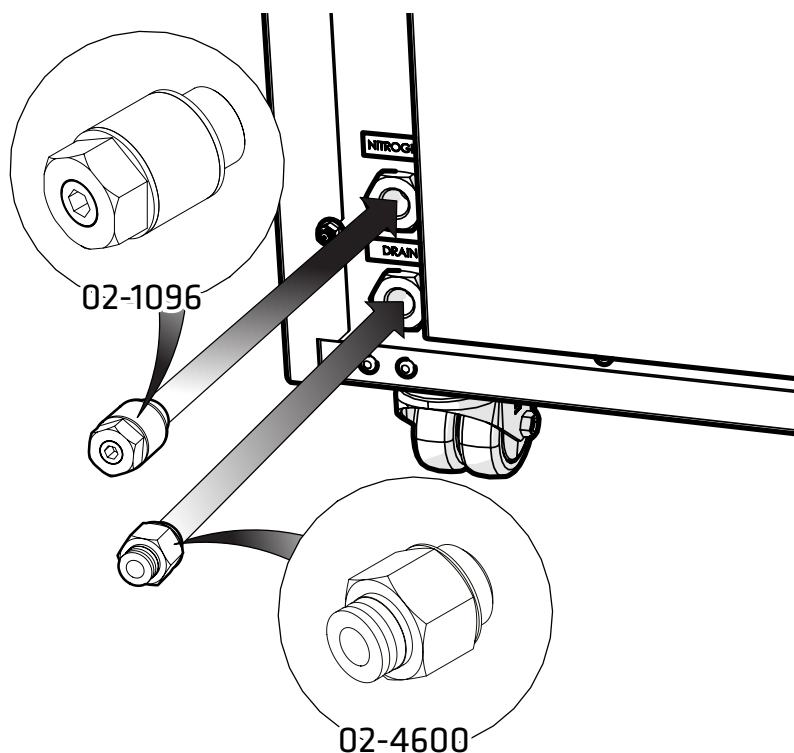
0°

Unpack the generator from the shipping crate, referring to the unpacking instruction located on the outside of the box, and **position on a flat surface** in desired area.

The unit should be left to acclimatize for 3 hours.

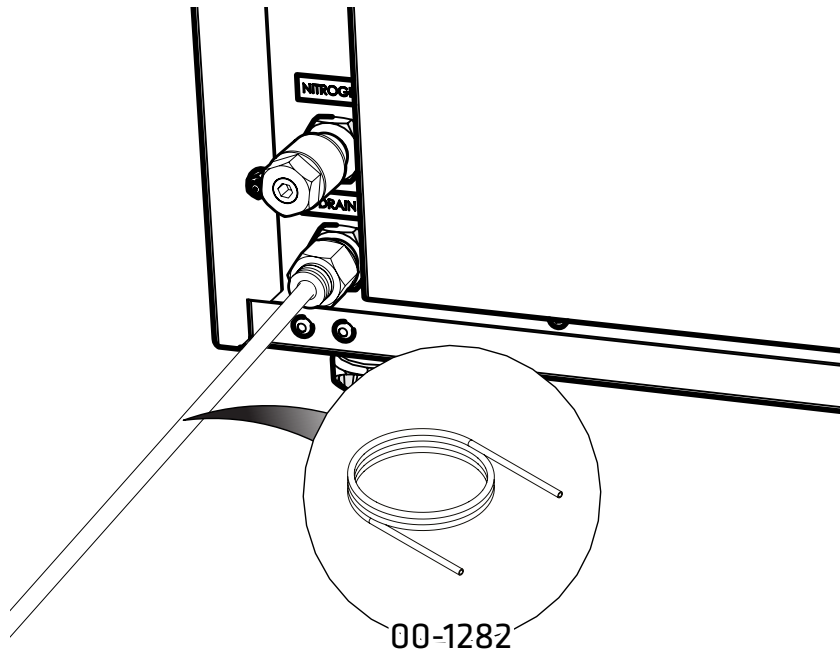
WARNING the weight of the unit constitutes a two man lift. Safe lifting practices are advised.

2.



Select the 6mm Push Fit Fitting 02-4600 and attach to the **Drain port** at the rear of the generator. **Attach the Flow Control Silencer 02-1096** to the **Nitrogen port**.

3.

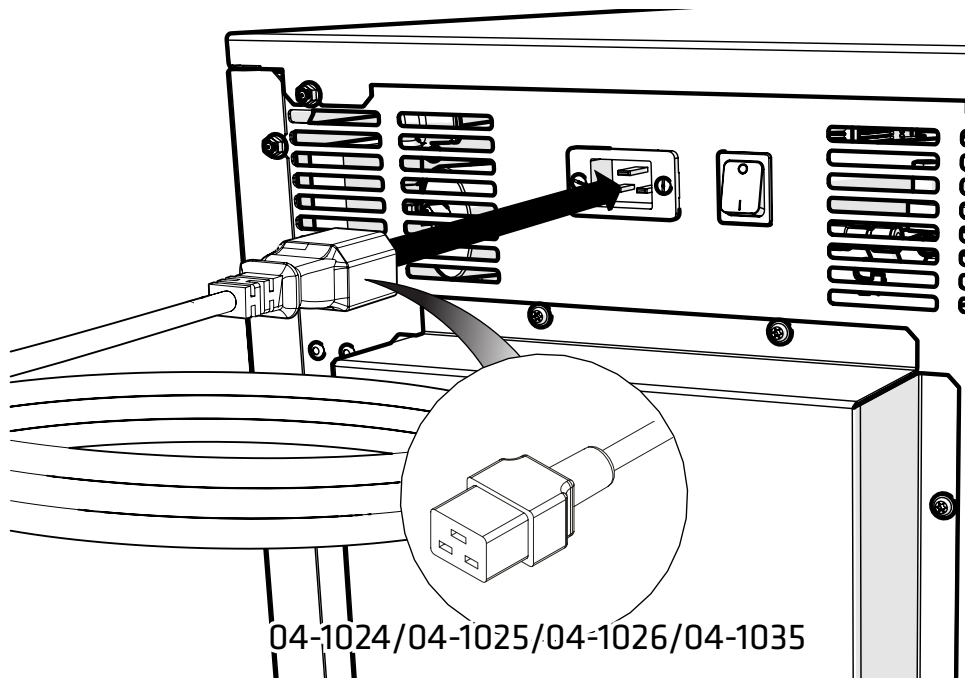


Connect the **6mm Polyethylene Tubing (00-1282)** to the **6mm Push Fit Fitting (02-4600)**.

Fit the other end of the tubing to a suitable drain connection or container.

WARNING: The container used MUST be a plastic material and MUST NOT be glass for safety reasons. The container MUST NOT have an airtight seal as water and air will be expelled periodically under slight pressure. The container must be placed at ground level with no elevated or spiralled tubing.

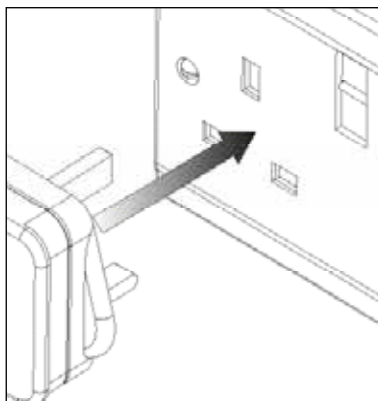
4.



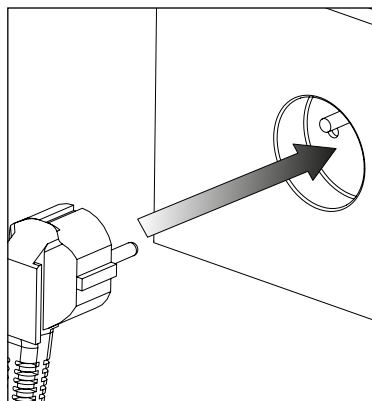
Select the appropriate power cable from the fittings kit and **plug the IEC 60320/C19 cable into the power input** at the rear of the generator.

5.

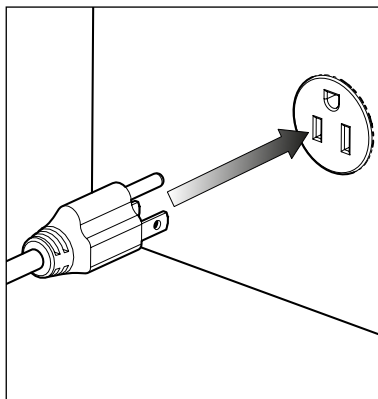
UK



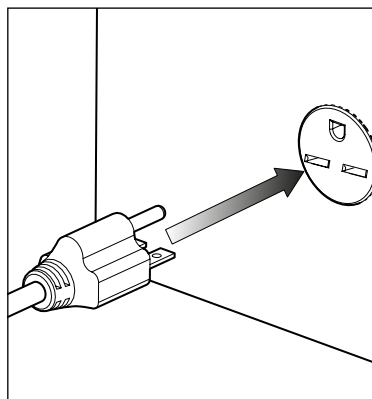
EU



US
110V



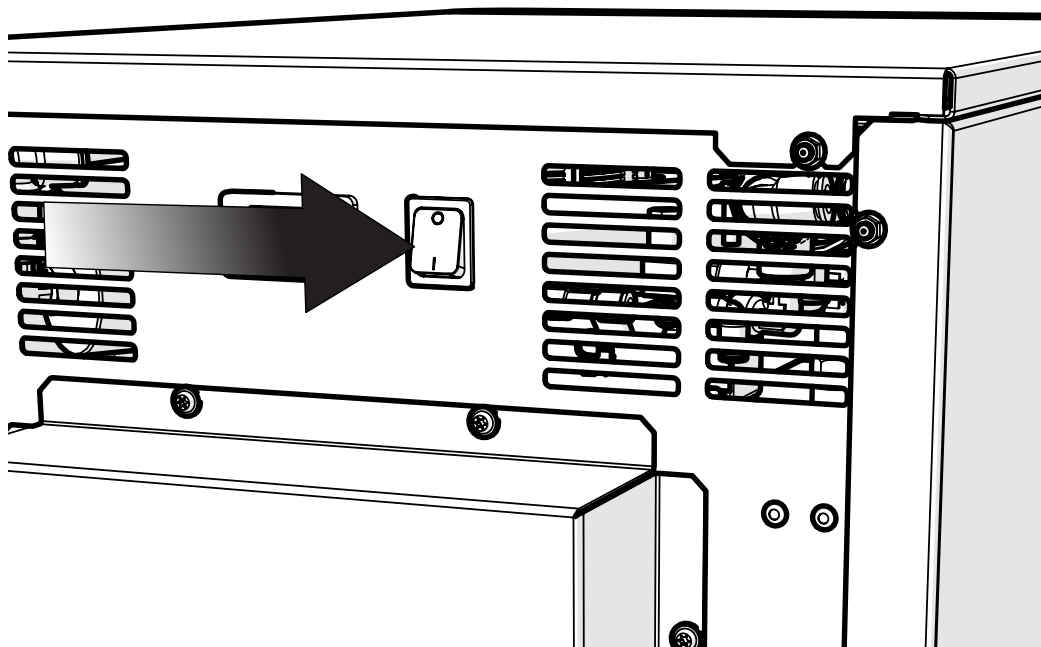
US
240V



Plug the mains cable into the corresponding **100VAC 50/60Hz, 120VAC 60Hz OR 230VAC 50/60Hz OR 240V 60Hz** single phase power supply.

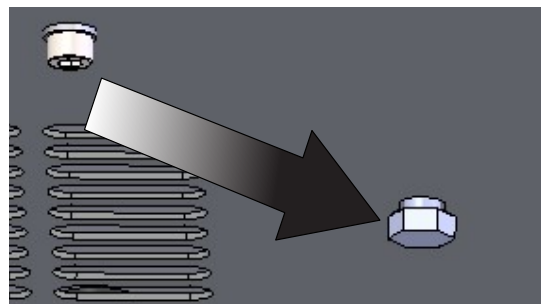
CAUTION ensure the correct cable has been selected for your electrical supply
Consult the **Electrical Requirements** section if you are unsure of the requirements of your generator.

6.



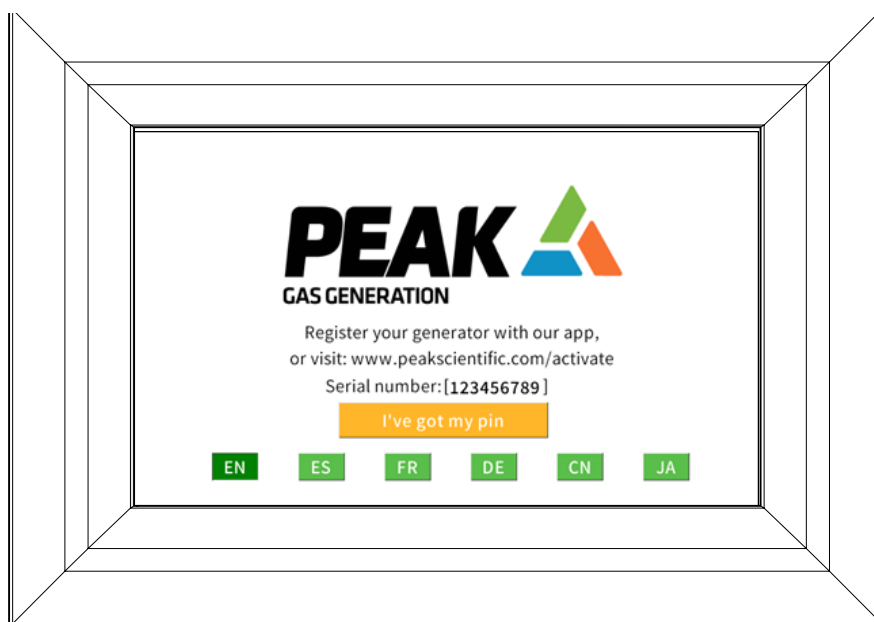
Switch the generator ON using the switch on the rear panel.

7.



Remove the TWO transit bolts from the base of the generator, turning anti-clockwise **using a 13mm spanner**.
Press OK on the HMI screen once the bolts have been removed.

8.

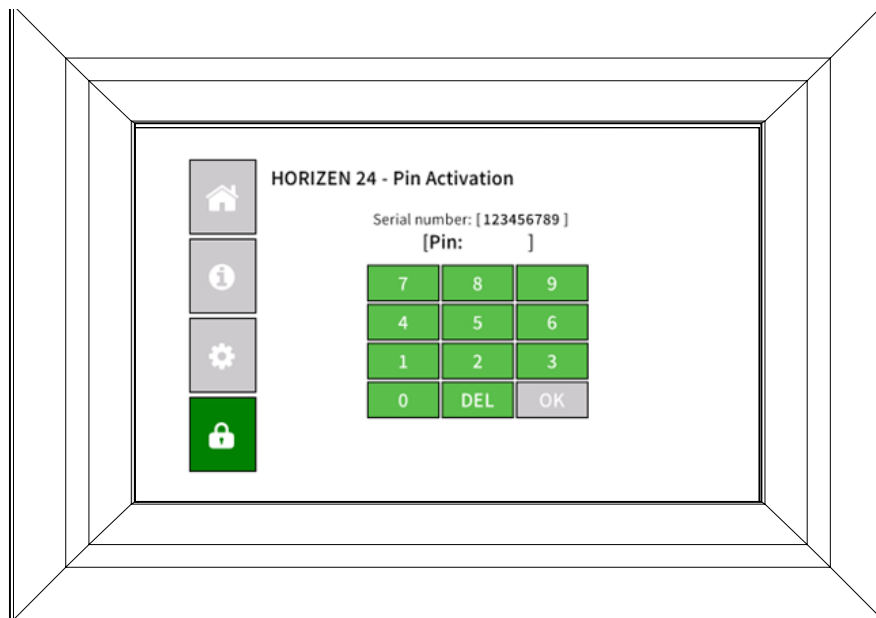


Before the generator will start-up for the first time the **user must enter a unique 4-digit PIN code**.

To receive your generator's unique PIN code, please register on the Peak website **www.peakscientific.com/activate** or **by downloading the Peak mobile app** from the Google Play Store or Apple App Store. A PIN code may also be requested by phoning the Peak helpdesk. You will require the generator serial number which is displayed on the screen.

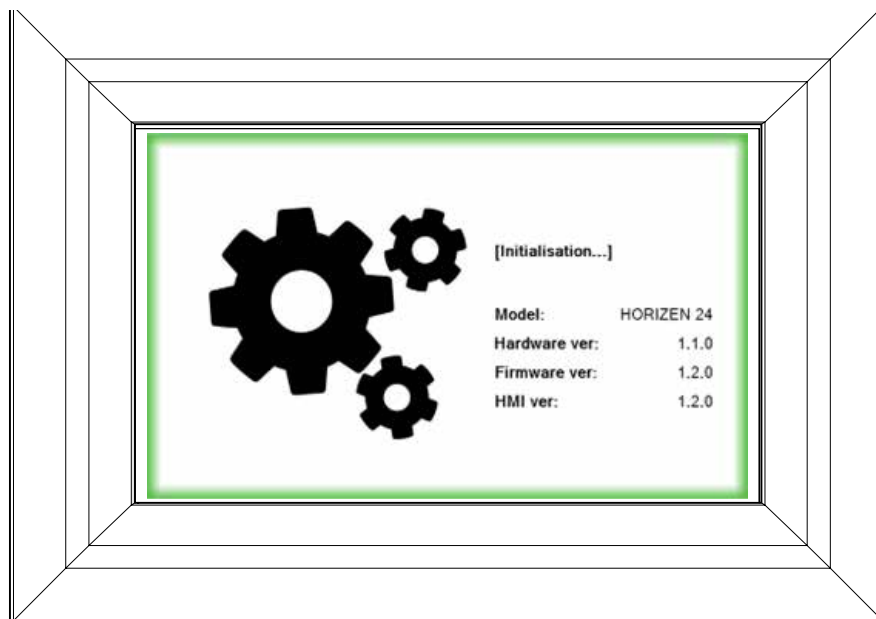
This code is only required on the initial start-up of the unit on the screen on the front of the generator.

9.



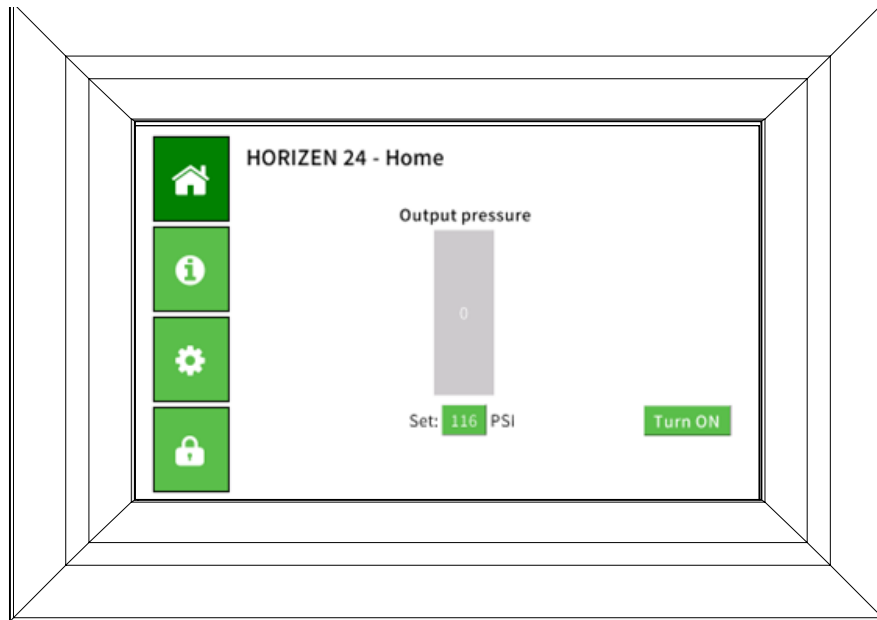
Enter your PIN. If entered incorrectly the screen will briefly display a wrong pass code warning before allowing a new PIN entry attempt.

10.



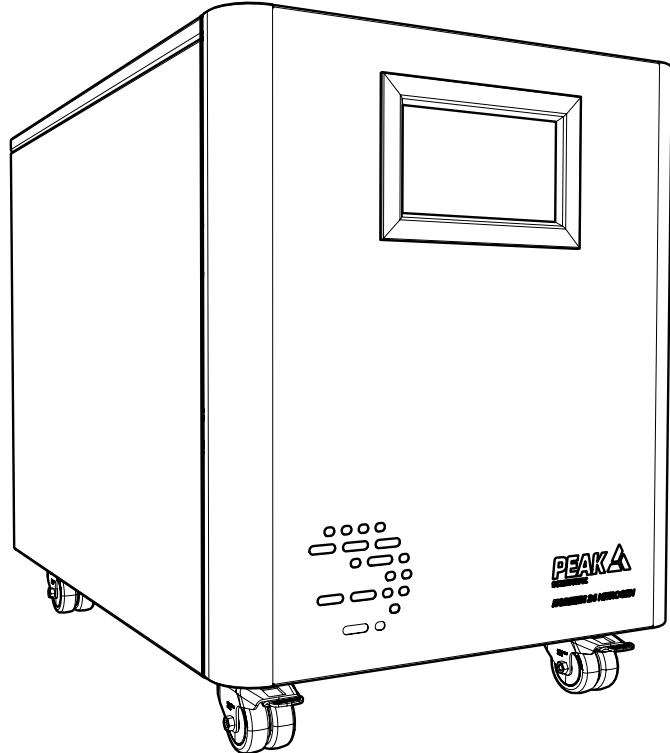
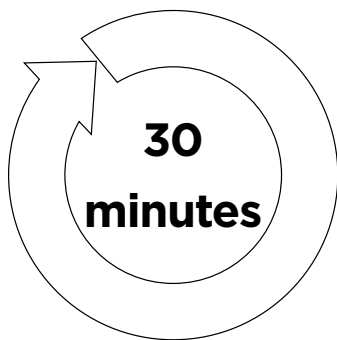
The generator will now **initialise**.

11.



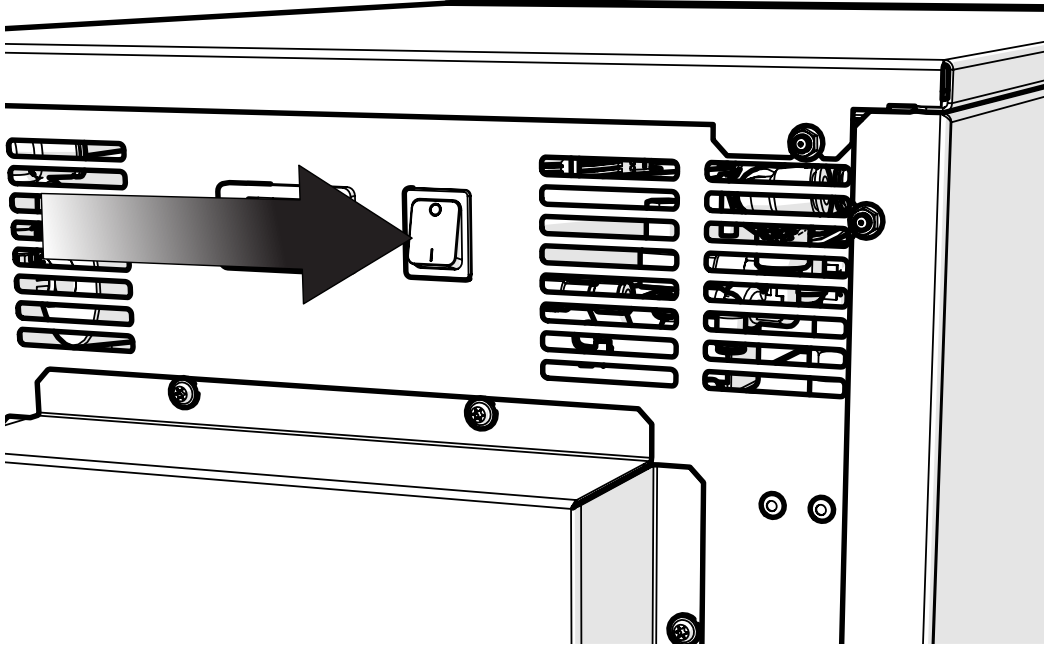
Press **Turn On** in the corner of the HMI screen. The outlet pressure reading on the display **will gradually increase** to the factory set pressure of 100 psi (6.9 bar). The outlet pressure can be configured to 116 psi (8.0) bar by pressing the pressure reading and typing **116** if required.

12.



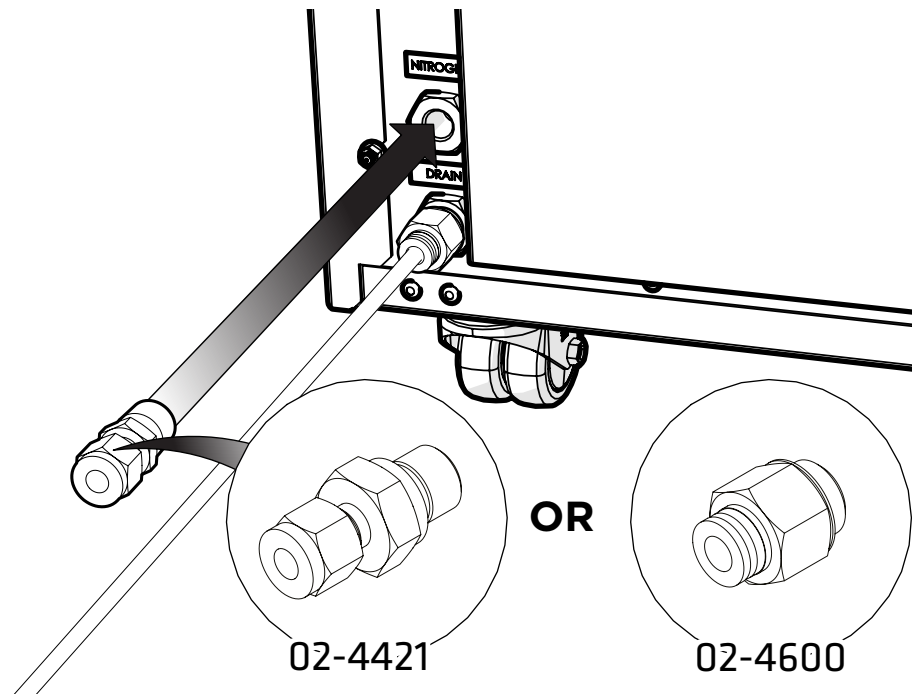
Leave the generator **switched on** for a period of **30 minutes** to purge the system.

13.



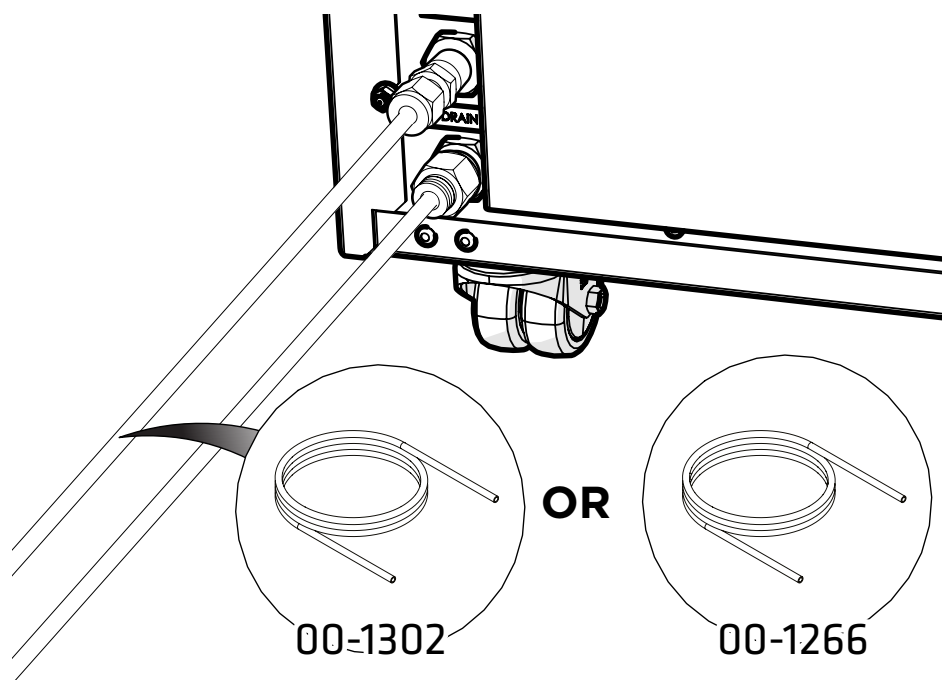
After 30 minutes of running, **press TURN OFF** in the corner of the HMI screen. Once the pressure gauge on the HMI screen **reads 0**, the **generator can be powered off** and the **silencer fitting can be removed from the Nitrogen port**.

14.



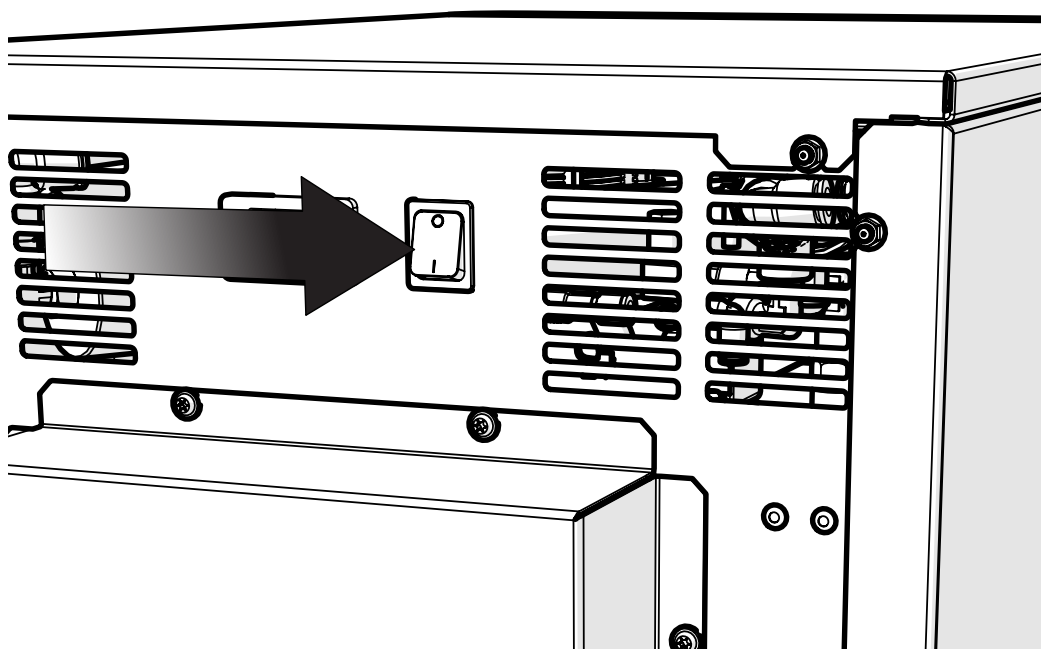
Remove the **Flow Control Silencer 02-1096** then, depending on the size of the inlet on the instrument, select either the $\frac{1}{4}$ " **Compression Fitting 02-4421** or the remaining $\frac{1}{4}$ "- **6mm Push Fit Fitting 02-4600**.

15.



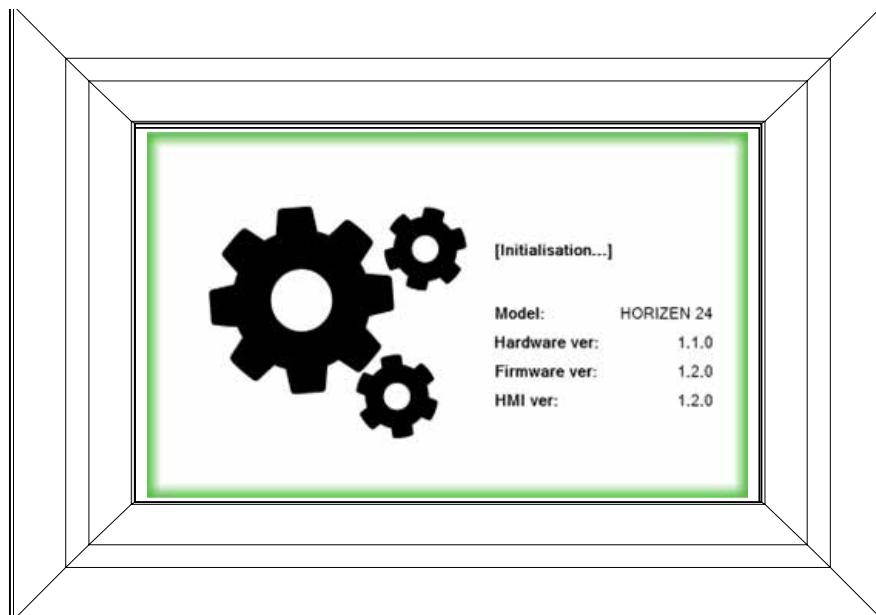
Attach the appropriate sized **Teflon tubing** to the fitting attached to the **nitrogen port** and connect to the **gas inlet of your instrument**.

16.



Switch the generator ON using the switch on the rear panel

17.

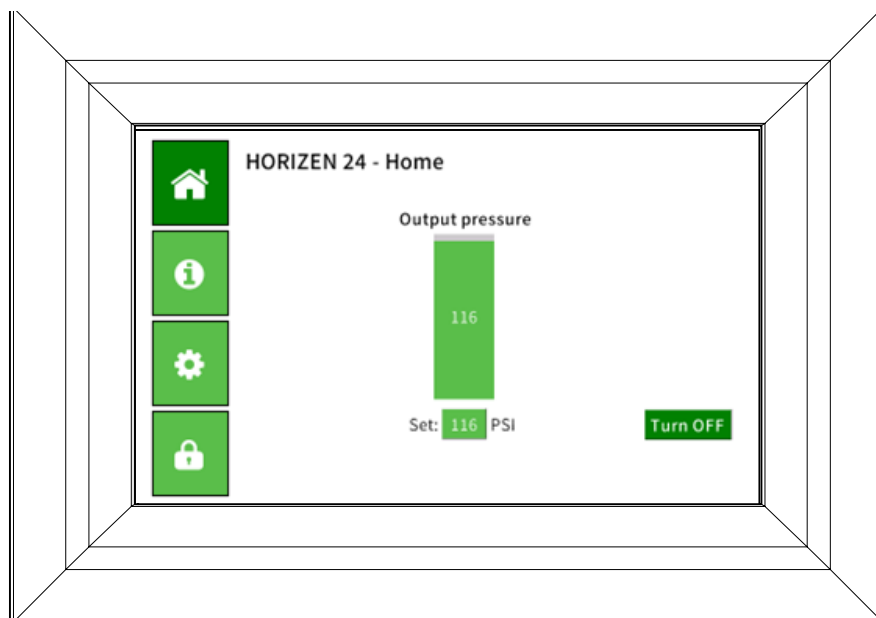


START UP DISCLAIMER

The generator will be ready to be connected to your LC-MS Instrument after a 30 minute purge run as LC-MS grade purity will be achieved within this period.

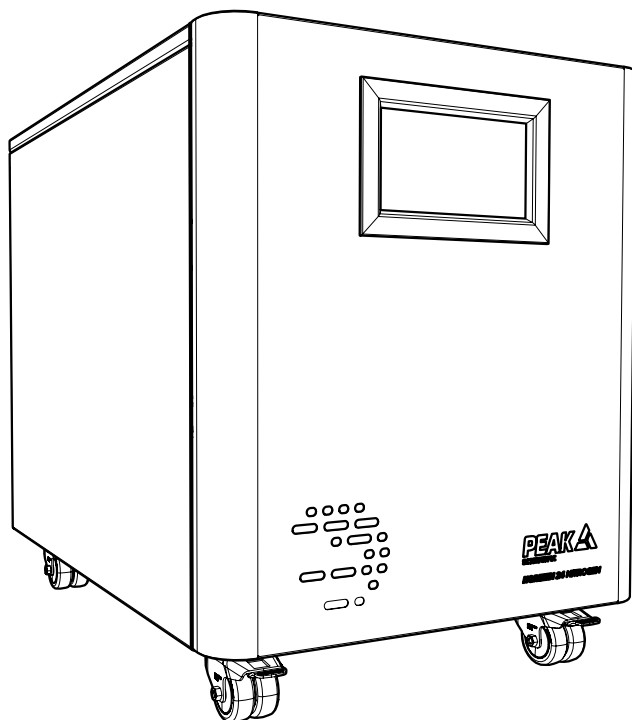
This only applies to the initial start up of the generator. Should your generator be switched off occasionally for a period of more than 48hrs, we recommend a short purge run of 30 minutes at 12LPM before resuming testing.

18.



The **pressure display** will again **gradually increase** to the factory set pressure.

19.



CONGRATULATIONS

Your **Peak Scientific** gas generator is now fully installed, operational and ready to supply gas on demand to your instrument.

General Notes

1. The generator is universal voltage and will operate with a 240V, 230V, 120V or 100V mains supply.
2. The Teflon tube supplied in the fittings kit is to allow the generator to be installed adjacent to the instrument it is supplying. If the generator is to be installed further away from the instrument then attention needs to be paid to pressure drops that could occur. The maximum distance away from the instrument the generator can be placed still using 6mm (4mm internal diameter) or ¼" (3/16" internal diameter) tubing is 3m. For further information relating to tubing lengths please refer to the user manual.

Electrical Requirements

Generator	Voltage	Frequency	Plug Type
Horizen 24	100-240V	50-60Hz	UK, EU, US 240V, US 120V

Please familiarise yourself with the full **User Manual** available at **www.peakscientific.com/downloads**. This includes all other technical specifications, operating instructions, service requirements, contact details and troubleshooting.

Please visit www.peakscientific.com/downloads to download the full User Manual for your gas generator.

[**PEAK Protected**]TM

Peak Scientific has highly trained, fully certified Field Service Engineers located in over 20 countries across every continent around the world. This allows us to provide an industry-leading rapid response service to our customers. With [**Peak Protected**], your laboratory's productivity becomes our top priority.

To discuss Peak Protected generator cover and payment options speak to your local Peak Representative or for further information contact: protected@peakscientific.com

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For further information on any of our generator products please contact marketing@peakscientific.com