

# Infinity 50 Series User Manual



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## Change History

Rev.	Comment	Name	Date
1	Update to Service Kit Information	Liam Couttie	16/04/2014
2A	Added 230v US Cable to Fittings Kit	Liam Couttie	07/10/2014
3A	5050 Pneumatic Diagram Update	Liam Couttie	14/01/2015
4	Content Update	Liam Couttie	12/04/2017
5	Pressure Switch Change	Liam Couttie	28/12/2017
6	SMG Guide Added	Cleo Denholm	24/06/2024

## How to use this manual

This manual is intended for end users and has been written so that it can either be read as a step by step guide to installation and usage; or as a reference document where you can skip to the relevant information.

Please review each of the following sections carefully.

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

## Introduction

The Peak Scientific Infinity 50\* Generator is designed to cater for the requirements of LCMS, Evaporators and other N<sub>2</sub> consuming applications.

## Warranties and Liabilities

1. The Company warrants that it has title to the Goods.
2. Subject to the provisions of this clause the Company warrants that the Goods shall comply in all material respects with any specification referred to in the Order Confirmation (as the same may be amended) and shall, subject thereto, be free from defects in material and workmanship for the lesser of a period of twelve months from the date of delivery or thirteen months from the date of dispatch from the factory.
3. Save as provided in this clause and except where the Goods are sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977) all warranties, conditions or other terms implied by statute or common law are hereby expressly excluded save to the extent they may not be lawfully excluded. When the Goods are sold to a consumer within the meaning of the Unfair Contract Terms Act 1977 their statutory rights are not affected by the provisions of this clause.
4. In the event of the Customer making a claim in respect of any defect in terms of clause 2 hereof the Customer must.
  - 4.1. Reasonably satisfy the Company that the Goods have been properly installed, commissioned, stored, serviced and used and without prejudice to the generality of the foregoing that any defect is not the direct or indirect result of lack of repair and/or servicing, incorrect repair and/or servicing, use of wrong materials and/or incorrect spare parts
  - 4.2. Allow the company to inspect the Goods and/or any installation and any relevant packaging as and when reasonably required by the Company.
5. Subject to the Company being notified of any defect as is referred to in sub-clause 2 hereof within a reasonable time of it becoming apparent and subject always to the terms of sub-clause 4 hereof, the Company shall, in its option, replace or repair the defective Goods or refund a proportionate part of the Price. The Company shall have no further liability to the Customer (save as mentioned in sub-clause 6 hereof).
6. The Company shall be liable to indemnify the Customer in respect of any claim for death or personal injury to any person in so far as such is attributable to the negligence or breach of duty of the Company or any failure by the Company to comply with the provisions of sub-clause 2 hereof.
7. Save as provided in sub-clause 2 hereof the Company shall not be liable in respect of any claim by the Customer for costs, damages, loss or expenses (whether direct, indirect, consequential or otherwise) or indemnity in any respect howsoever arising including, but not by way of limitation, liability arising in negligence (other than pursuant to clause 6 above) that may be suffered by the Customer or any third party.

## Safety Notices

### Symbols

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




	A <b>WARNING</b> 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 <b>WARNING</b> notice until the indicated conditions are fully understood or met.
	A <b>CAUTION</b> 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 <b>CAUTION</b> 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.

Table 1 - Safety Symbols

### Safety Notice to Users



These instructions must be read thoroughly and understood before installation and operation of your Peak Scientific Infinity 50\*. 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.



Nitrogen is not a poisonous gas, but if the concentration in the inhaled air becomes too high there will be a risk of asphyxiation.

## EU Declaration of Conformity

We Peak Scientific Instruments Ltd.  
Of Fountain Crescent, Inchinnan, Renfrewshire, PA4 9RE

Hereby declare that, this declaration of conformity is issued under the sole responsibility of the manufacturer.

Equipment: Nitrogen Gas Generator

Model: Infinity 50

To which this declaration relates, is in conformity with the following applicable EU Directives, harmonized standards, and other normative requirements.

- **Low Voltage Directive 2014/35/EU**  
EN 61010-1: 2010 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use.
- **Electromagnetic Compatibility Directive 2014/30/EU**  
EN 61326-1: 2013 Electrical Equipment for Measurement, Control and Laboratory Use - EMC Requirements. (Class A)
- **Restriction on the use of certain hazardous substances in electronic equipment (RoHS) Directive 2011/65/EU as amended by EU 2015/863.**
- **FCC 47 CFR Part 15 class A**  
Unintentional radiators; Conducted and Radiated emissions limits.

Signed for and on behalf of Peak Scientific by

Signed:



Name: Fraser Dunn

Position: Design Engineering Manager  
Peak Scientific Instruments Ltd,  
Inchinnan, Renfrew, Scotland, PA4 9RE, UK.

Date: 30th November 2021





## UK Declaration of Conformity

We Peak Scientific Instruments Ltd.  
Of Fountain Crescent, Inchinnan, Renfrewshire, PA4 9RE

Hereby declare that, this declaration of conformity is issued under the sole responsibility of the manufacturer.

Equipment: Nitrogen Gas Generator  
Model: Infinity 50

To which this declaration relates, is in conformity with the following applicable UK Statutory Instruments, Standards and other normative requirements.

- **The Electrical Equipment (Safety) Regulations 2016 (SI 2016 / 1101) as amended.**  
BS61010-1:2010 Safety Requirements for Electrical Equipment for Measurement Control and Laboratory Use.
- **The Electromagnetic Compatibility Regulations 2016 (SI 2016 / 1091) as amended.**  
BS61326-1:2013 Electrical Equipment for Measurement , Control and Laboratory Use - EMC Requirements.
- **The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (SI 2012 / 3032) as amended.**

Signed for and on behalf of Peak Scientific y

Signed: 

Name: Fraser Dunn

Position: Design Engineering Manager  
Peak Scientific Instruments Ltd,  
Inchinnan, Renfrew, Scotland, PA4 9RE, UK.

Date: 30th November 2021



## WEEE Compliance Statement

The Waste Electrical and Electronic Equipment (WEEE) Regulations SI 2013 No 3113 and or the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU apply to all electrical and electronic equipment placed on the market in the UK and EU covered by the scope of regulations which can be found in the Government Guidance Notes (PDF) produced by the Department for Business Innovation and skills for the UK and here for Europe.

All PEAK products that are subject to the WEEE directive are compliant with the WEEE marking requirement. Such products are marked with the “crossed-out wheellie bin” symbol (shown below) in accordance with European standard EN50419. All old electrical equipment can be recycled. Please do not dispose of any electrical equipment (including those marked with this symbol) in general rubbish bins. Please contact your dealer or distributor for clarity.



## Technical Specification

### Environment

	5010	5020	5030	5040
Minimum Operating Ambient Temperature	5°C (41°F)			
Maximum Operating Ambient Temperature*	30°C (86°F)			
Maximum Relative Humidity	70%			

\* Maximum safety ambient temperature 35°C

\*\* When taken out of storage the Generator should be allowed to acclimatize at room temperature for a minimum of 3 hours before operation.

### Generator Outlets

Minimum Air Inlet Pressure	125 psi (8.7 bar)			
Maximum Air Inlet Pressure	145 psi (9.9 bar)			
Minimum Air Inlet Flow	180l/min	360l/min	540l/min	720l/min
Maximum Gas Output Pressure	100 psi (6.8 bar)			
Maximum Pressure Drop (Outlet-Inlet)	8 psi (0.55 bar)			
Maximum Outlet Flow (High Purity Nitrogen)	60 l/min	120 l/min	180 l/min	240 l/min
Start-Up Time For Purity	60 minutes			
Particles	0.01 µm			

### Electrical Requirements

Voltage	100V	230V
Frequency	60Hz	50Hz
Current	0.222A	0.123A
Fuse	S506-1.6-R	
Input connection	C20 Plug	
Power cord (Supplied)	C19 socket to local connection (13A minimum)	
Pollution degree	2	
Installation category	II	

### General

Dimensions in cm (inches) W x D x H	50 (19.6) x 80 (31.5) x 115 (45.2)			
Weight kg/lbs	70/154	75/165	80/176	85/187
Shipping weight kg/lbs	73/161	78/172	83/183	88/194
Noise level	10 dBA @ 1m			



It should be noted that the gas pressures and flows are factory set. The pressures shown on the Generator front panel are in excess of the maximum inlet pressure of the Mass Spectrometer. This is to allow for known pressure drops.

## Technical Specification

### Environment

	5050	5060	5070	5080
Minimum Operating Ambient Temperature	5°C (41°F)			
Maximum Operating Ambient Temperature*	30°C (86°F)			
Maximum Relative Humidity	70%			

\* Maximum safety ambient temperature 35°C

\*\* When taken out of storage the Generator should be allowed to acclimatize at room temperature for a minimum of 3 hours before operation.

### Generator Outlets

Minimum Air Inlet Pressure	125 psi (8.7 bar)			
Maximum Air Inlet Pressure	145 psi (9.9 bar)			
Minimum Air Inlet Flow	900l/min	1080l/min	1260l/min	1440l/min
Maximum Gas Output Pressure	100 psi (6.8 bar)			
Maximum Pressure Drop (Outlet-Inlet)	8 psi (0.55 bar)			
Maximum Outlet Flow (High Purity Nitrogen)	300 l/min	360 l/min	420 l/min	480l/min
Start-Up Time For Purity	60 minutes			
Particles	0.01 µm			

### Electrical Requirements

Voltage	100V	230V
Frequency	60Hz	50Hz
Current	0.222A	0.123A
Fuse	S506-1.6-R	
Input connection	C20 Plug	
Power cord (Supplied)	C19 socket to local connection (13A minimum)	
Pollution degree	2	
Installation category	II	

### General

Dimensions in cm (inches) W x D x H	50 (19.6) x 80 (31.5) x 115 (45.2)			
Weight kg/lbs	90/193	95/209	100/220	105/231
Shipping weight kg/lbs	93/205	98/216	103/227	108/238
Noise level	54 dBA @ 1m			

## Unpacking

Although Peak Scientific takes every precaution with safe transit and packaging, it is advisable to fully inspect the unit for any sign of transit damage.

Check 'SHOCKWATCH' label for signs of rough handling prior to un-packing -



Any damage should be reported immediately to the carrier and Peak Scientific or the Peak Partner from where the unit was purchased.

Follow the unpacking instructions posted on the side of the crate. It will require two people to remove the unit from the shipping crate and to manoeuvre the Generator onto the floor.

Please save the product packaging for storage or future shipment of the Generator.

Note: Included with the Generator is a "Fittings Kit" containing mains power leads for UK, EU and US also all the required fittings. Be careful not to discard these with the packaging.

## Installation

### Generator Environment



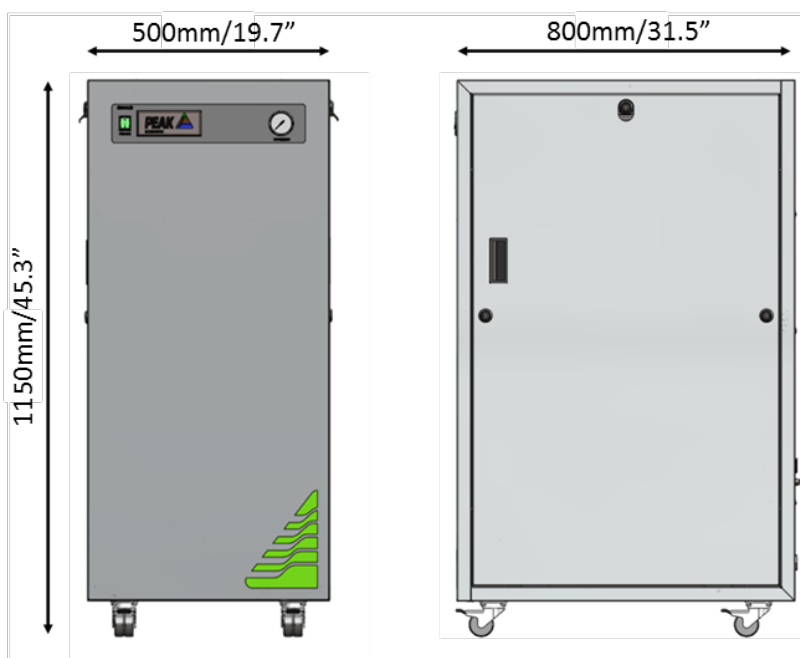
The Generator is designed for indoor use only. It should be installed adjacent to the Mass Spectrometer(s) it is supplying. If this is not convenient then the unit can be sited elsewhere, however, consideration should be made of the lengths of pipe runs as pressure drops can result from extended runs of pipe. Please see the [Tubing lengths](#) section for further details.



Performance of the Generator (like all sophisticated equipment) is affected by ambient conditions. Note should also be taken to the proximity of Air Conditioning outlets. These can sometimes give rise to “pockets” of air with high relative humidity. Operation of the unit within such a pocket could adversely affect its performance. Consideration should also be given to the air flow around the unit. It is recommended that an air gap of 75mm (3”) should be maintained down both sides, at the rear and across the top of the unit. Please refer to the drawing below for the general dimensions of the unit.

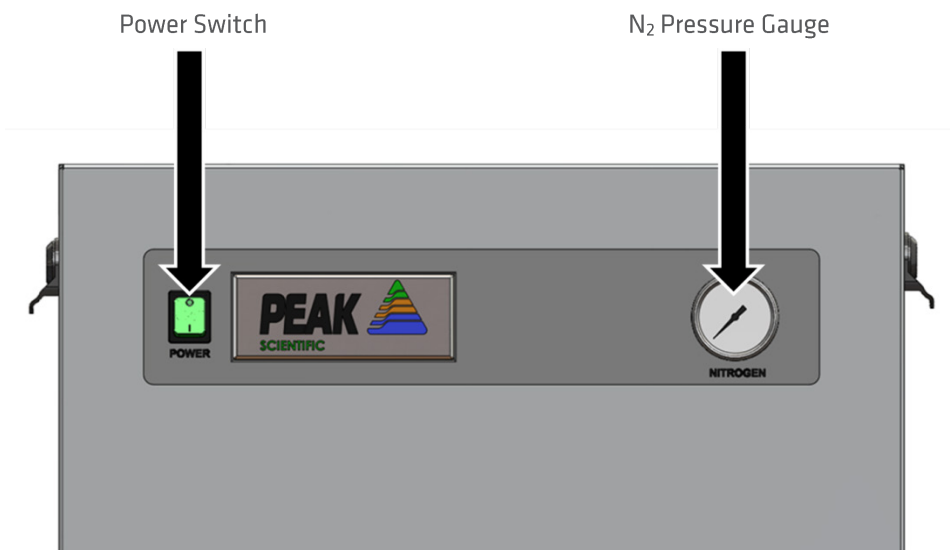
Maximum Ambient Conditions: 30°C (dry bulb) 80%RH (Max) Non-Condensing

### General Dimensions



The Generator must always be placed on a level surface. Failure to do so will affect the performance of the Generator.

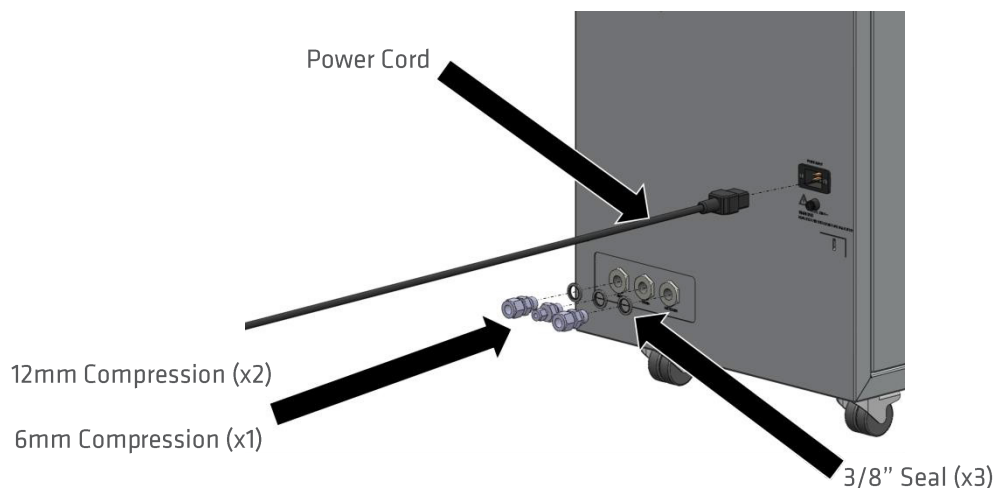
## Unit Controls



## Rear Connections

### Fittings Kit

Supplied in the Fittings Kit are all the fittings required to connect the Infinity 50\* Generator to the appliance. The contents of the Fittings Kit are as follows:



- |     |                                 |      |
|-----|---------------------------------|------|
| 1.  | 8mm Hex Key                     | x 1  |
| 2.  | 6mm Compression Fitting         | x 1  |
| 3.  | 12mm Compression Fitting        | x 2  |
| 4.  | 3/8" Seal                       | x 3  |
| 5.  | 6mm Tubing                      | x 3m |
| 6.  | 12mm Tubing                     | x 6m |
| 7.  | C19 Mains Cable (UK)            | x 1  |
| 8.  | C19 Mains Cable (Euro)          | x 1  |
| 9.  | C19 Mains Cable (US 110v)       | x 1  |
| 10. | C19 Mains Cable (US 230v)       | x 1  |
| 11. | Installation Guide Infinity 50* | x 1  |
| 12. | User Manual Disc Infinity 50*   | x 1  |

All of the Generator output ports are located on the output panel at the rear of the Generator.

### Drain Connection

Fit the 6mm push fit fitting (item 2 from fittings kit) to the drain port located on the output panel. Tighten using a 16mm or 5/8" spanner. Use the 6mm tubing (item 4 from fittings kit) to connect this to a suitable drain connection or container. It should be noted that the Generator can expel a considerable amount of water from this (dependant on ambient humidity).





If a container is used it should be emptied at regular intervals. The container must NOT have an air tight seal as water and air are expelled at pressure.

## Air Connection

The Nitrogen Generator should be connected to a clean, dry, OIL – FREE source of compressed air. A minimum pressure of 125 psig is required for efficient operation of the Generator. Any doubts as to the suitability of your compressed air supply should be referred to the factory for advice.

**A MAXIMUM OIL VAPOUR CONTENT OF 0.01 mg per m<sup>3</sup> is PERMISSIBLE**

Air Inlet and Nitrogen Outlet connections are at the rear of the generator in the middle right side of the panel. The Air inlet connection is the left port, 12mm Swagelok Compression Fitting, Outlet port is 12mm Swagelok Compression Fitting. The generator is supplied with *Breathing Air* pre-filters and an *Activated Carbon* post filter, which are fitted internally. The *Breathing Air* filters will drain moisture and are equipped with automatic drains. This is connected to the 6mm Swagelok Compression Fitting, between the Input and Output connections. Any bulk moisture in the inlet air will be trapped by these filters and released through this drain port, which should be led to a convenient place.

## Electrical Connection

Connect the Generator to an 85-264 VAC single-phase supply using the power cord provided. If the appropriate power cord is not supplied; a new plug, rated to at least 12 amps, can be fitted by a qualified electrician.



This unit is classified as SAFETY CLASS 1. THIS UNIT MUST BE EARTHED. Before connecting the unit to the mains supply, please check the information on the serial plate. The mains supply must be of the stated AC voltage and frequency.

EARTH/GROUND (E):-	Green & Yellow	or	Green
LIVE (L):-	Brown	or	Black
Neutral (N):-	Blue	or	White

## Commissioning

With the Generator installed as described earlier. Disconnect the Nitrogen Outlet connection to allow the generator to vent to atmosphere until the unit is stabilized then open the air supply. The Generator has been pre-set in the factory to give the specified output flow-rate and pressure. Once the Membrane reaches the design pressure the Generator will stabilise and produce pure Nitrogen. Maximum purity will be achieved after around 1 hour. After this time the generator can be re-connected to the application.

The design of the generator is that it will deliver up to rated output flow of Nitrogen at 100 psig. Should the demand for Nitrogen be less than the rated output flow, or indeed should the demand stop the generator will Automatically go into standby mode this will switch off inlet Air supply, and on demand of Nitrogen the pressure switch will detect and energize solenoid valve and generator will start to produce Nitrogen. The generator is protected from over pressurising.

## Tubing Lengths



The diameter of the tubing which will be connected to the gas outlet is important and is determined by the length of tubing required. Failure to follow these recommendations could lead to pressure between generator and application.

- |                   |   |
|-------------------|---|
| < 10 meters:      | Use 10/8 (10mm O/D, 8mm I/D) Tubing.  |
| > 10 - 40 meters: | Use 12/10 (12mm O/D, 10mm I/D). Tubing.   |
| > 40 metres:      | Please contact Peak Scientific with the relevant distance and we will calculate the flow resistance and the tubing size required. |

A combination of 12/10 and 10/8 tubing may be used to ensure that there is no large diameter tubing within the lab (i.e. for the first 20 meters from the Generator use 12/10 and the final 10 meters to the Mass Spectrometer use 10/8 tubing). Keep the connections and bends to a minimum.

The imperial equivalents are: 10/8 = 3/8" O/D, 5/16" I/D  
12/10 = 1/2" O/D, 3/8" I/D



## IMPORTANT DOCUMENTS

### Warranty Entitlement

To register your generator for your warranty entitlement, send the completed form to Peak Scientific by:

- Email [warranty@peakscientific.com](mailto:warranty@peakscientific.com)
- Online [http://www.peakscientific.com/service-and-support/warranty\\_registration](http://www.peakscientific.com/service-and-support/warranty_registration)
- Phone +44 (0)141 530 4185
- Fax +44 (0)141 812 8200

PRODUCT WARRANTY REGISTRATION	
COMPANY:	CONTACT NAME:
ADDRESS:	
	EMAIL ADDRESS:
CITY/TOWN:	<b>GENERATOR SERIAL NUMBER:</b>
POSTCODE:	
COUNTRY:	MODEL TYPE:
TELEPHONE:	<b>INSTALLATION DATE (DD/MM/YYYY):</b>

### Important Please Note:

You have 1 month to register your Peak Scientific product from the date of shipment.

If you wish to defer installation of your generator you must notify Peak Scientific within 1 month of the shipment date. This can be done by emailing [warranty@peakscientific.com](mailto:warranty@peakscientific.com) Once registered the warranty will be honoured for a period of 12 months after the installation date.

For any generators that remain unregistered the warranty will begin from date of shipment.

Thank you on behalf of Peak Scientific.

## Normal Operation

The Infinity 50\* Gas Generator is designed specifically to minimize operator involvement. Given that the system is installed as described in earlier sections and is serviced in accordance with the specified maintenance recommendations (see [Service Requirements](#)), then it should simply be a matter of turning the Generator on when it is required.

The Generator will automatically produce the factory set flow and pressure as detailed in the [Technical Specifications](#).

## On Demand Gas

Each individual system produces gas on demand. If the instrument is operating and requires a gas flow, the selected system will supply this to suit the requirements of the instrument. If the instrument requirement for gas stops, the system will also stop, once it has reached its upper set limit in the internal storage tanks. If the demand from the instrument starts again, the system will detect the demand for gas and will automatically start again to suit the demand.

## Cleaning

Clean the outside of the Generator only using warm soapy water and a clean damp cloth. Ensure the cloth is thoroughly rung out to remove excess fluid prior to use.



Cleaning should only be undertaken with the power switched off and the power cord removed from the rear of the Generator.



Under no circumstances should any solvents or abrasive cleaning solutions be used as these can contain fumes that could be harmful to the Generator.



Care should be taken with Leak Detections Liquids.

## Service Requirements



Servicing and/or repair of the Generator should only be undertaken by a **TECHNICALLY COMPETENT PERSON** with the Generator in a safely isolated condition.

Due to the simplicity of the design and the small number of moving parts the Infinity 50\* Nitrogen Generators will have a long and trouble free life. However as with all scientific and technical equipment it should be regularly inspected and serviced as below.

## Service Schedule

Service interval	Component	Part No.	5010-40	5050-80
			Qty.	Qty.
12 months	Element Active Carbon	00-0043	1	2
	Element 0.01 micron	00-0042	1	2
	RAC Filter Element	00-0041	1	1

As an alternative to purchasing the 12 month service items individually an Annual Service Kit is available as one part number. This contains all the filters required for this Generator.

Purchase Interval	Component	Part No.	Qty.
12 months	Annual Service Kit 5010-5040	08-0313	1
	Annual Service Kit 5050-5080	08-0314	1

## Safely Isolated Condition

The unit is in a safely isolated condition when it is disconnected from its application and fully de-pressurised. Directions for isolating the Generator are shown below.



Failure to place the Generator in a safely isolated condition when instructed to do so may lead to personal injury or injury to others and even death.

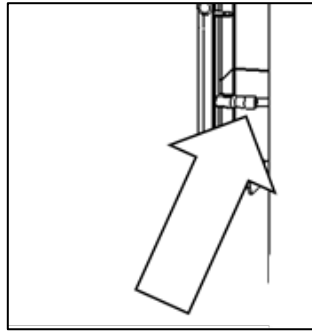
- a) Switch generator off.
- b) Disconnect from air supply.
- c) Ensure the output pressure gauge reads zero. (If gauge does not fall to zero, loosen the outlet fitting slightly to allow trapped gas to escape).
- d) Disconnect from the application.

## Safe State After Repair

To guarantee the generator is in a safe state after a repair, please ensure the following conditions are met;

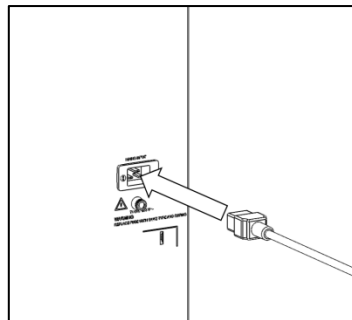
**All earth leads have been reconnected.**

Earth leads should be connected to the earth tabs located on the door panels, as shown below.



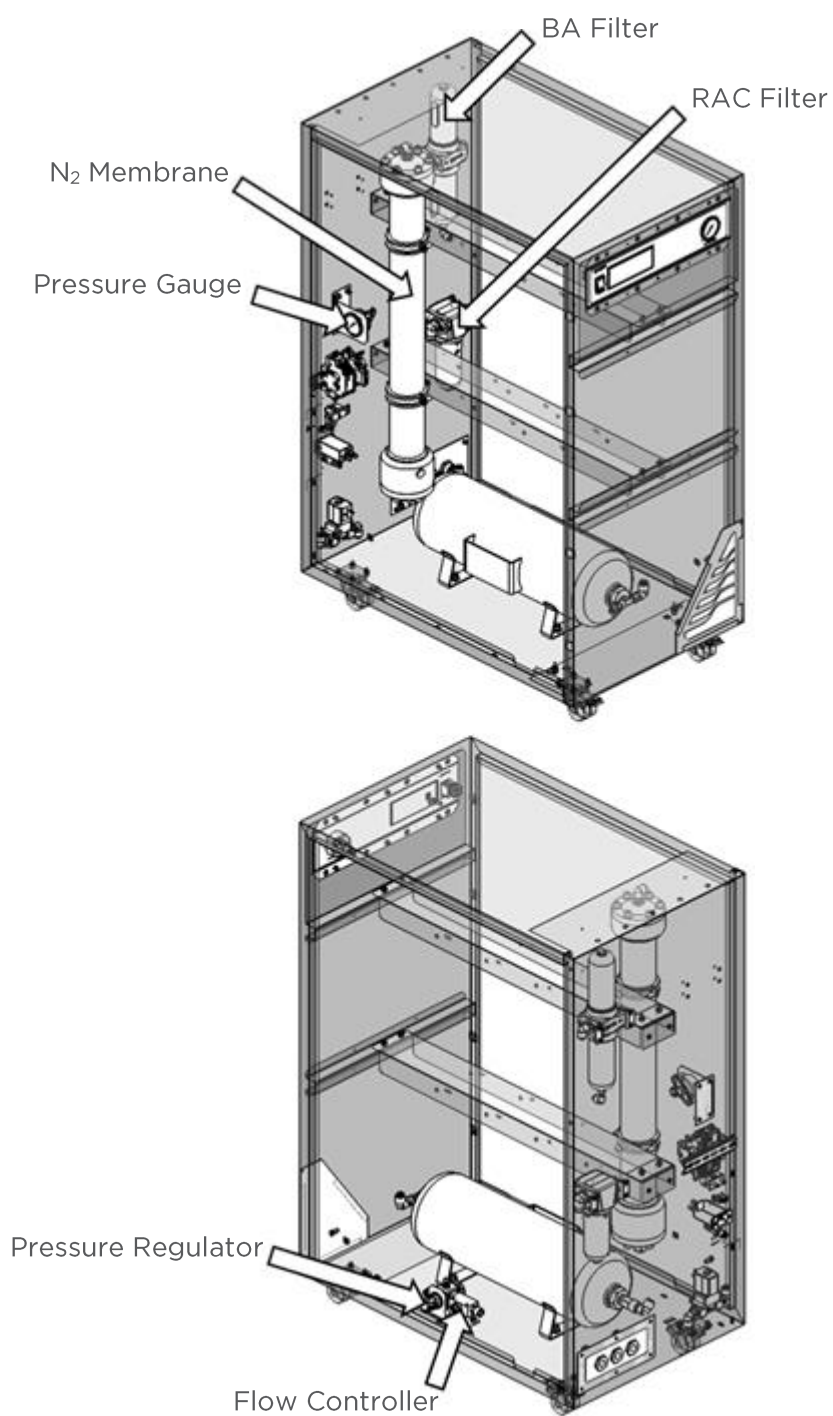
**The electricity cable has been correctly refitted.**

The mains cable should be plugged into the IEC power inlet located on the rear panel of the generator. This unit is classified as SAFETY CLASS 1. THIS UNIT MUST BE EARTHED.



# Infinity 50\* User Manual

## Product Overview

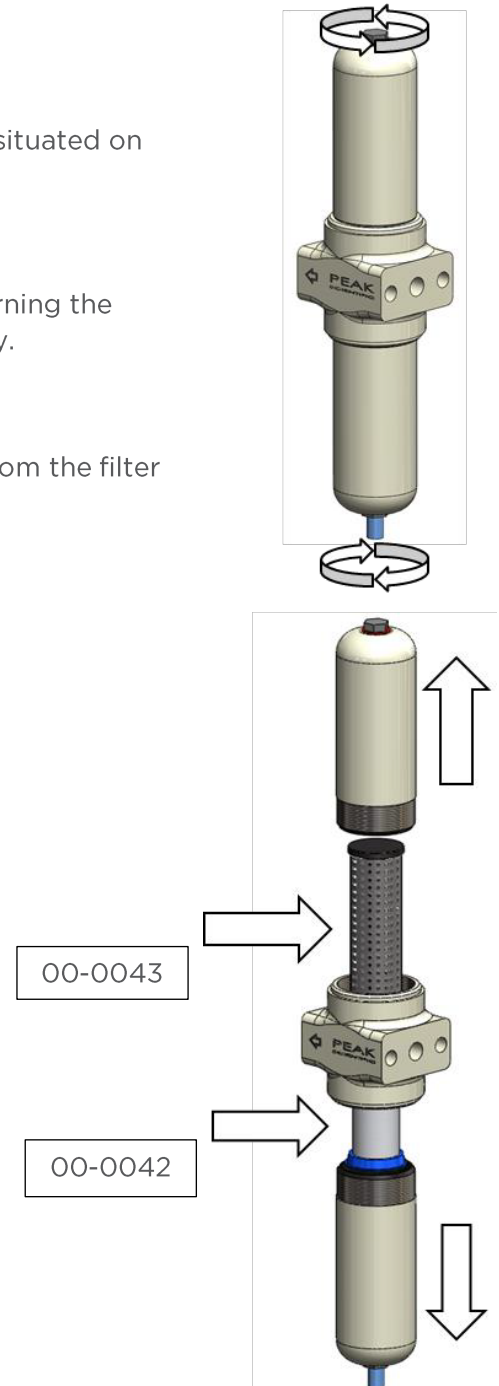


## Breathing Air Filter Element Replacement



Ensure that Generator is in Safely Isolated Condition

1. Remove 6mm drain tubing from push-fit stud situated on under-side of the bowl.
2. Remove the top and bottom filter bowls by turning the bowl clockwise and anti-clockwise respectively.
3. Remove the filter element by pulling it away from the filter assembly.
4. Fit the replacement elements.
5. Re-fit the filter bowls.





## RAC Filter Element Replacement

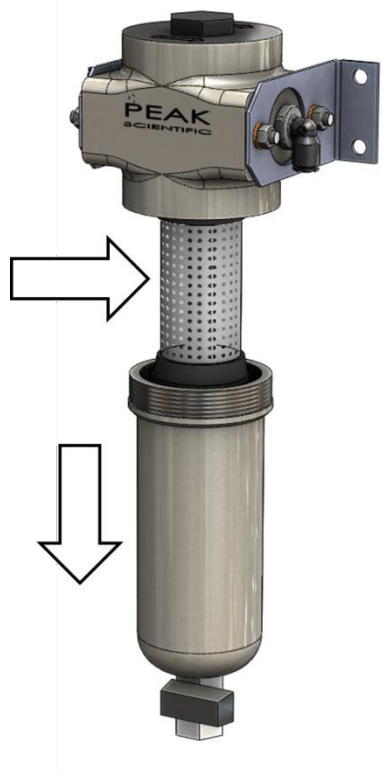


Ensure that Generator is in Safely Isolated Condition

1. Open the filter bowl valve to ensure it is depressurised.
2. Remove the filter bowl by turning it as shown to reveal the RAC filter element Part number 00-0041.
  - a. For easier access, the filter assembly can be removed from the cabinet by removing the 4 of nyloc nuts and disconnecting the tubing.
3. Remove and replace the filter element and re-assemble.



00-0041

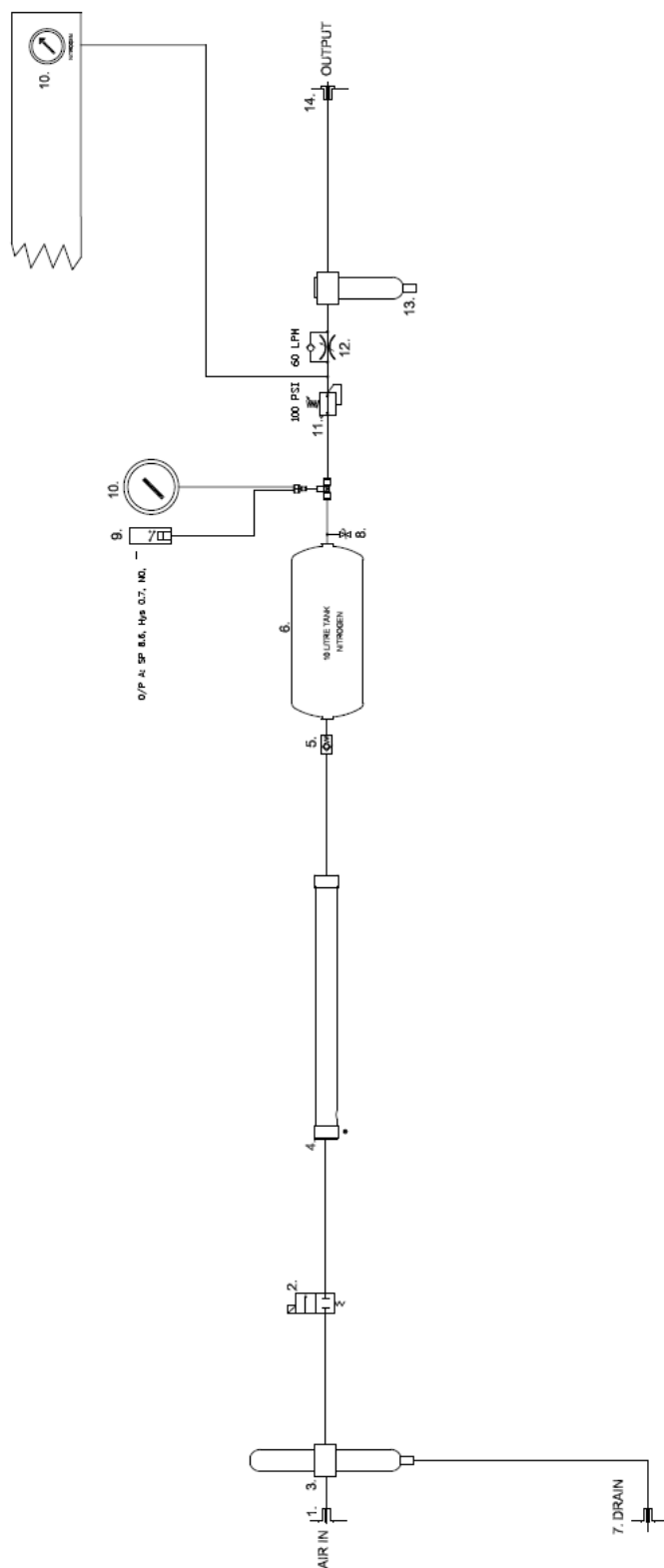


## Trouble Shooting

Problem	Possible Solution
The Generator will not switch on & the power switch does not illuminate.	<ul style="list-style-type: none"><li>• Ensure the power cord is plugged into the generator and that the power socket is turned on.</li><li>• Check the fuse in the power cord plug.</li><li>• Contact your service provider.</li></ul>
The generator will not switch on but the power switch is illuminated.	<ul style="list-style-type: none"><li>• Disconnect the power cord from the rear of the unit.</li><li>• Replace the fuse, reconnect the power cord.</li><li>• Contact your service provider.</li></ul>

# Infinity 50\* User Manual

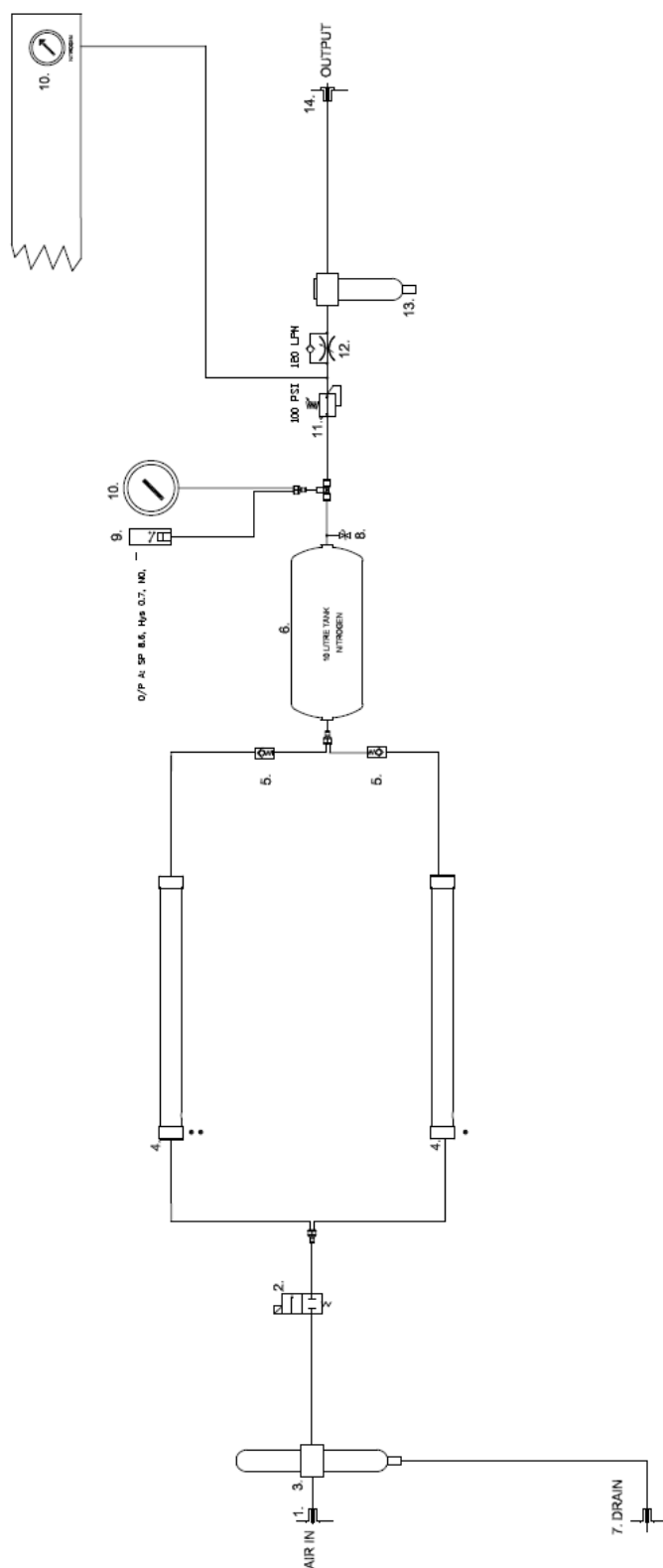
## Infinity 5010 Pneumatic Schematic Rev 1



- 1. Air In
- 2. Inlet Valve
- 3. BA Filter
- 4. Membrane
- 5. Non-Return Valve
- 6. 10L Tank
- 7. Drain
- 8. Safety Relief Valve
- 9. Pressure Switch
- 10. Pressure Gauge
- 11. Pressure Regulator
- 12. Flow Controller
- 13. RAC Filter
- 14. Output

# Infinity 50\* User Manual

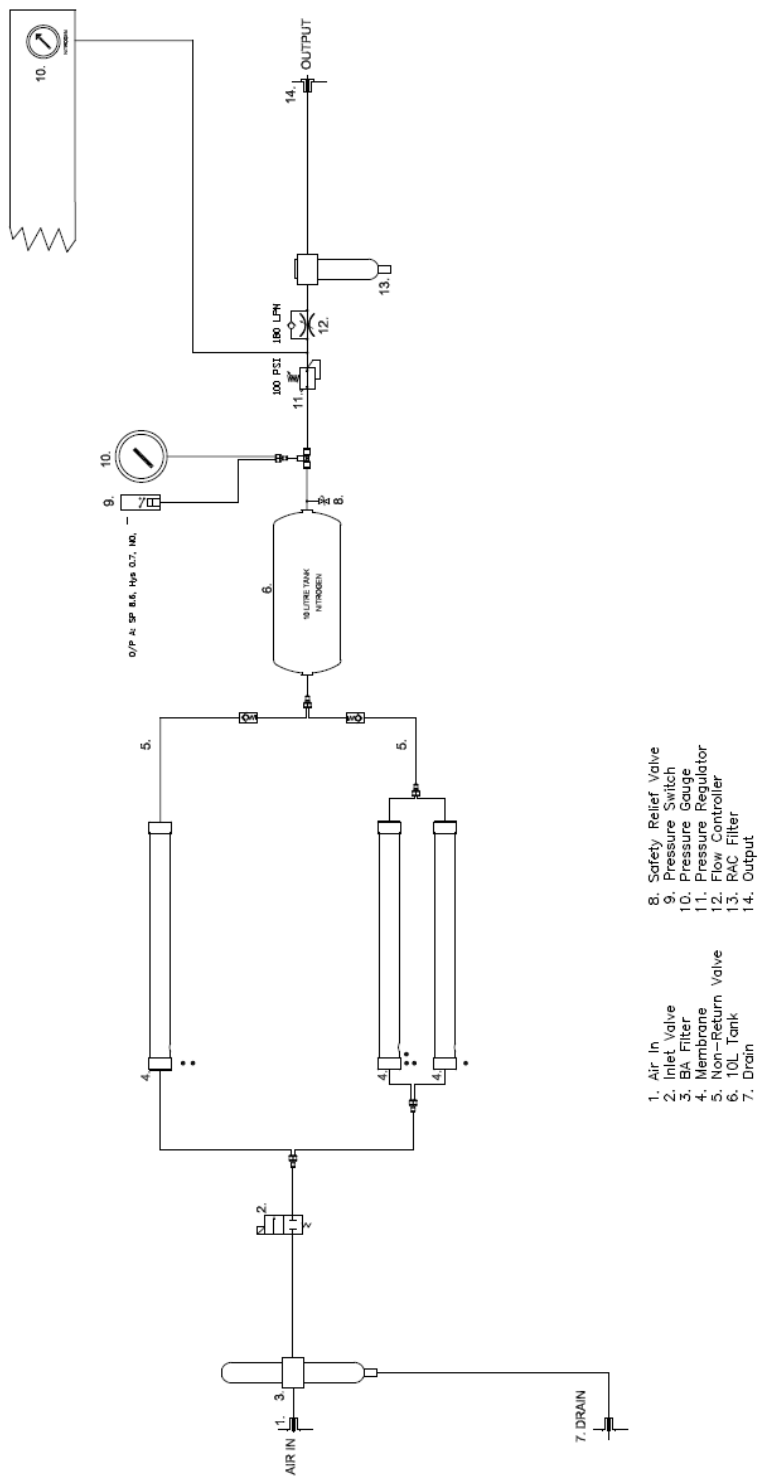
## Infinity 5020 Pneumatic Schematic Rev 1



- 1. Air In
- 2. Inlet Valve
- 3. BA Filter
- 4. Membrane
- 5. Non-Return Valve
- 6. 10L Tank
- 7. Drain
- 8. Safety Relief Valve
- 9. Pressure Switch
- 10. Pressure Gauge
- 11. Pressure Regulator
- 12. Flow Controller
- 13. RAC Filter
- 14. Output

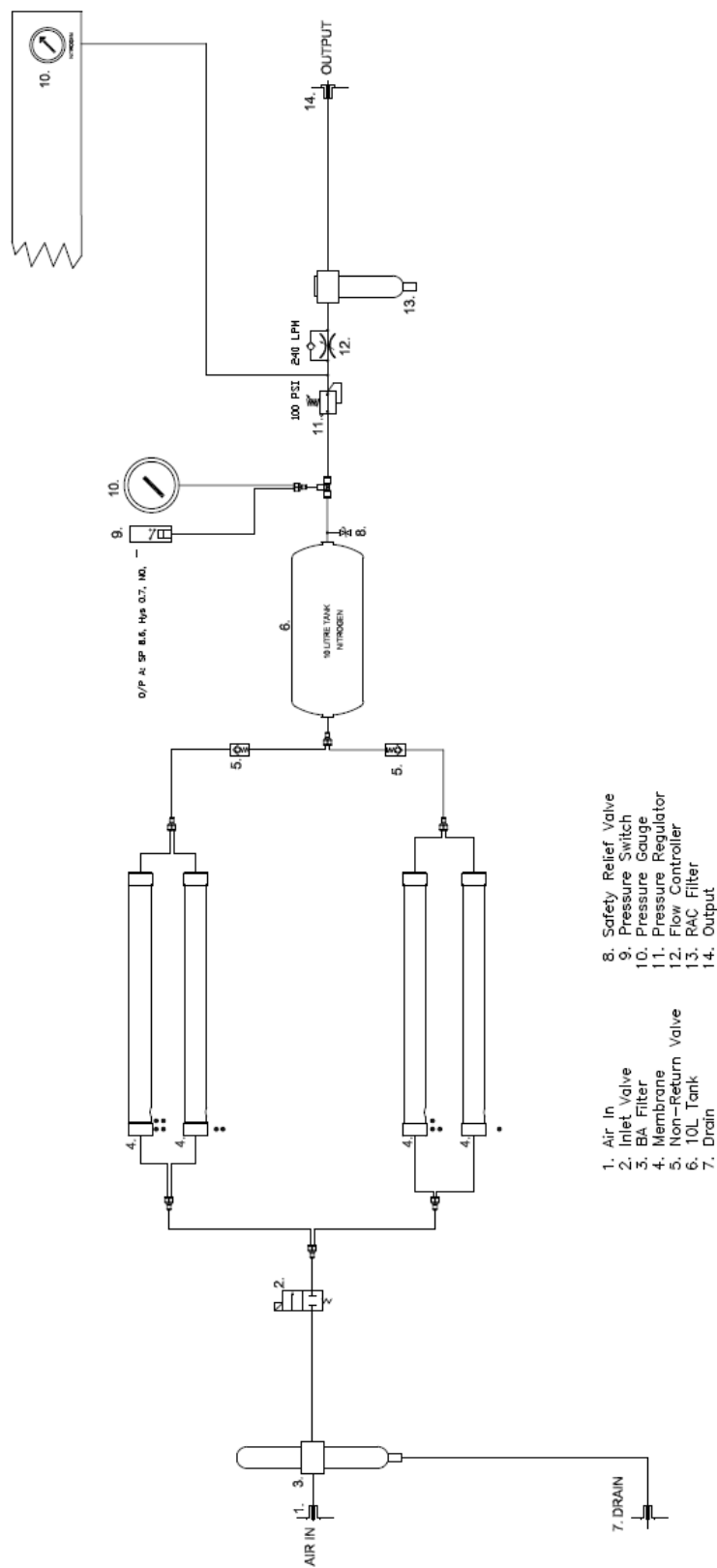
# Infinity 50\* User Manual

## Infinity 5030 Pneumatic Schematic Rev 1



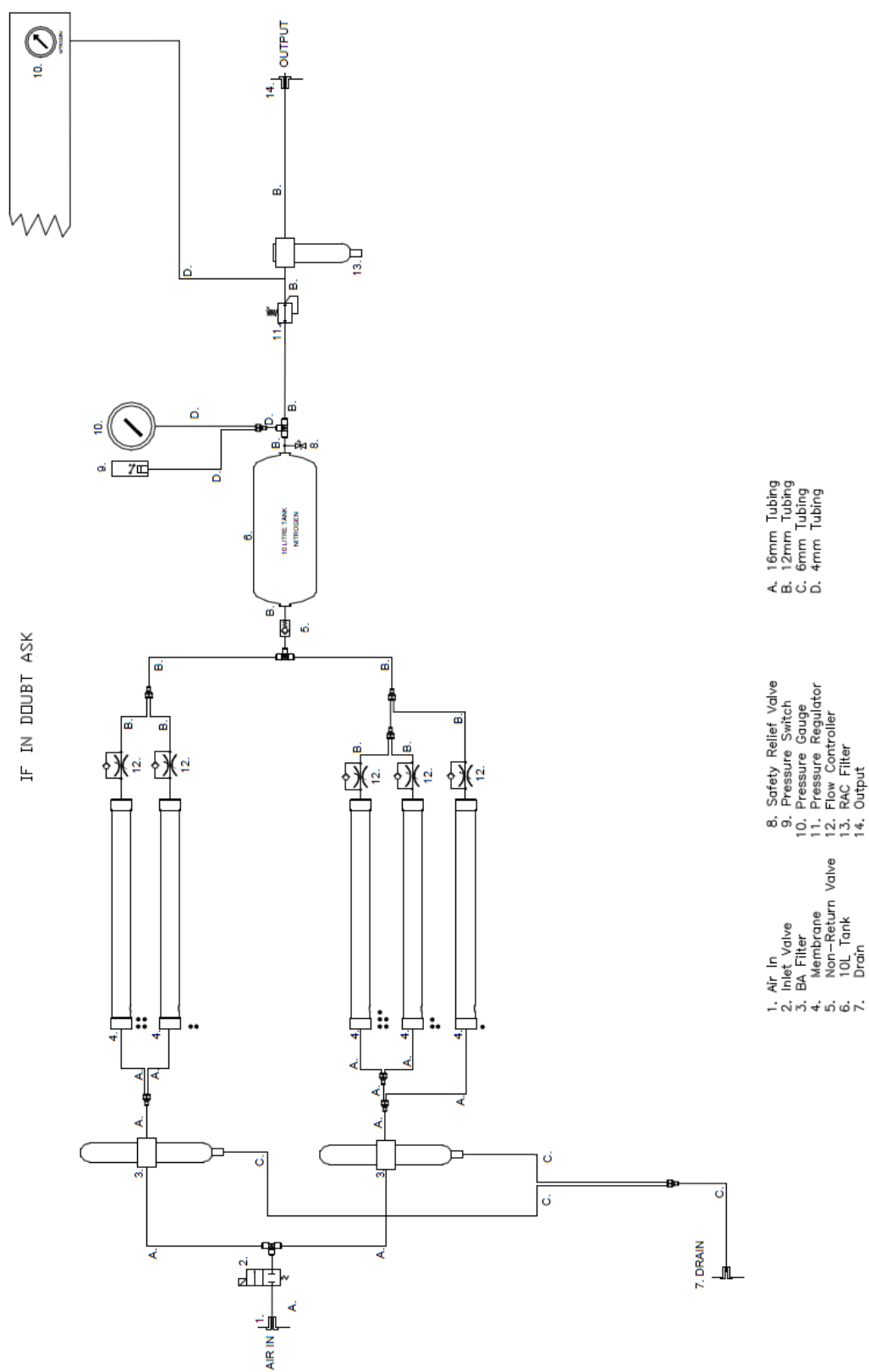
# Infinity 50\* User Manual

## Infinity 5040 Pneumatic Schematic Rev 1



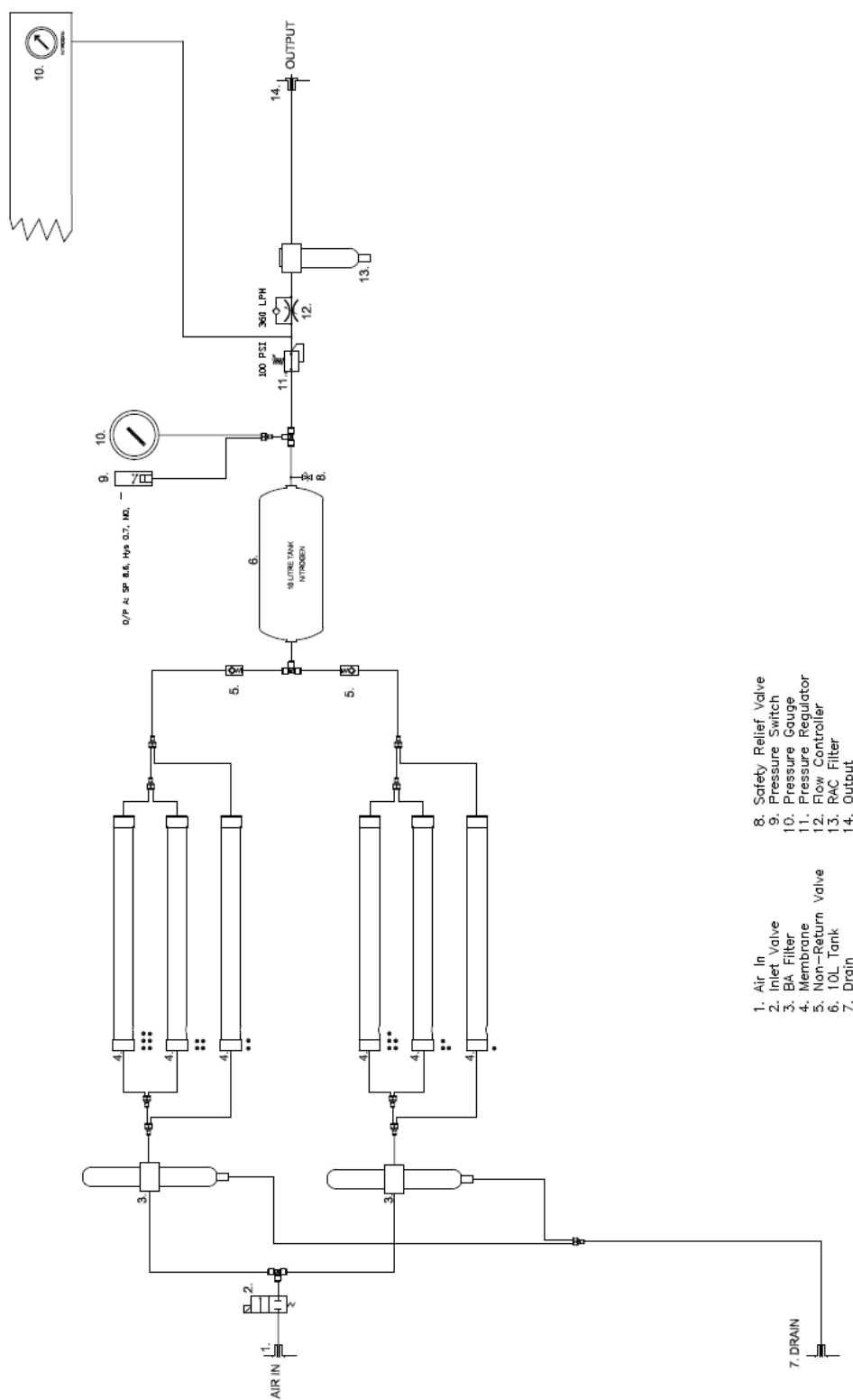
# Infinity 50\* User Manual

## Infinity 5050 Pneumatic Schematic Rev 3A



# Infinity 50\* User Manual

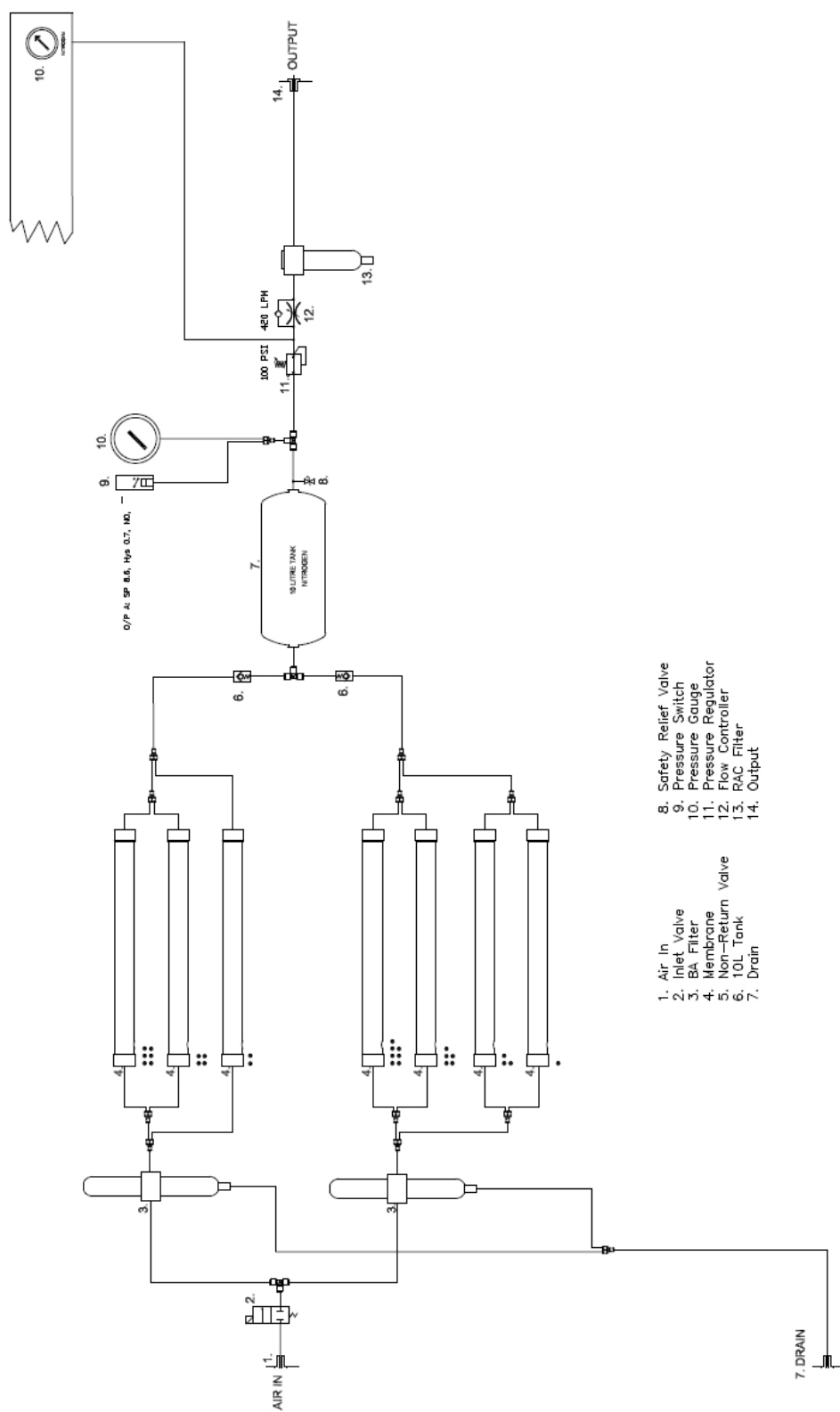
## Infinity 5060 Pneumatic Schematic Rev 1





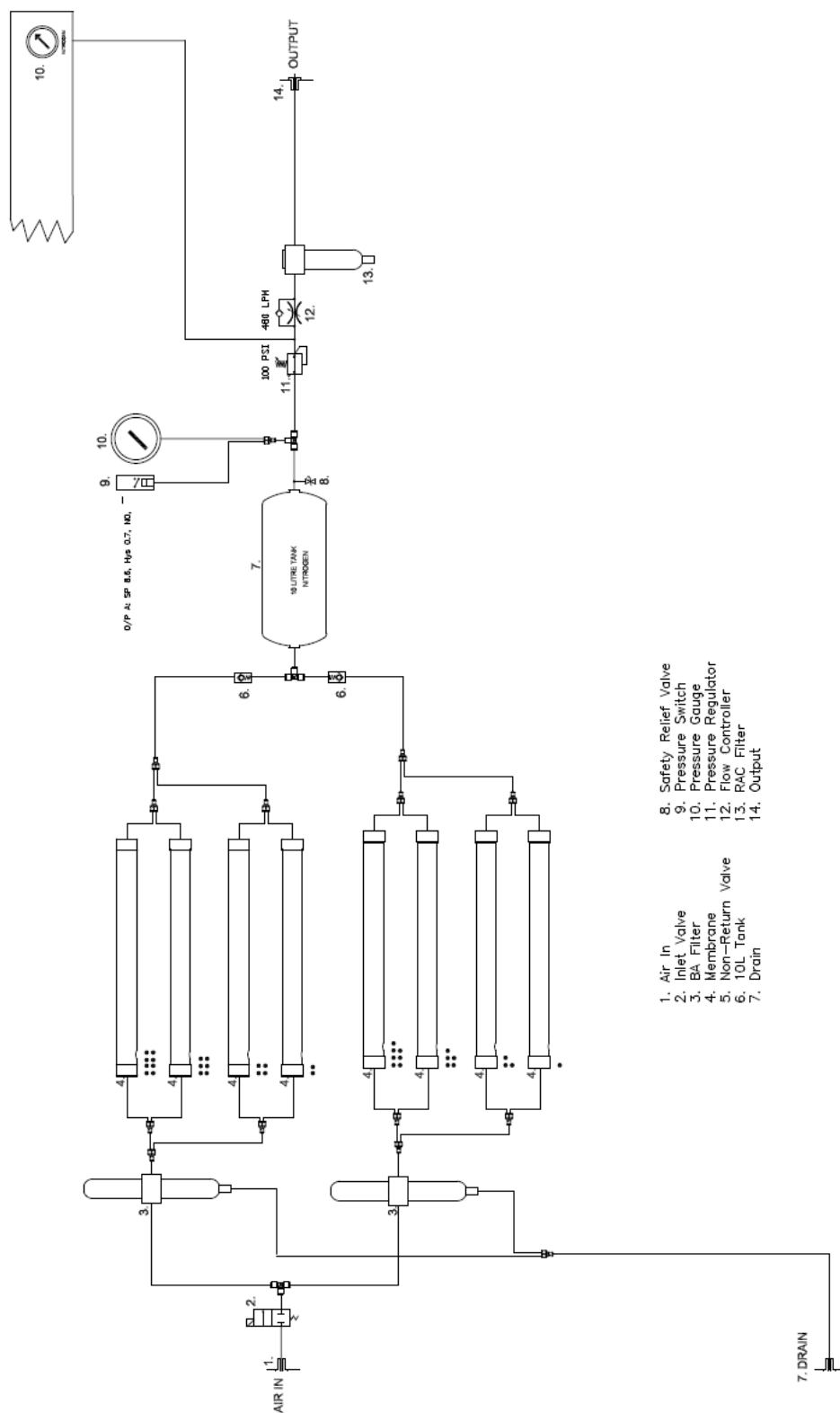
# Infinity 50\* User Manual

## Infinity 5070 Pneumatic Schematic Rev 1



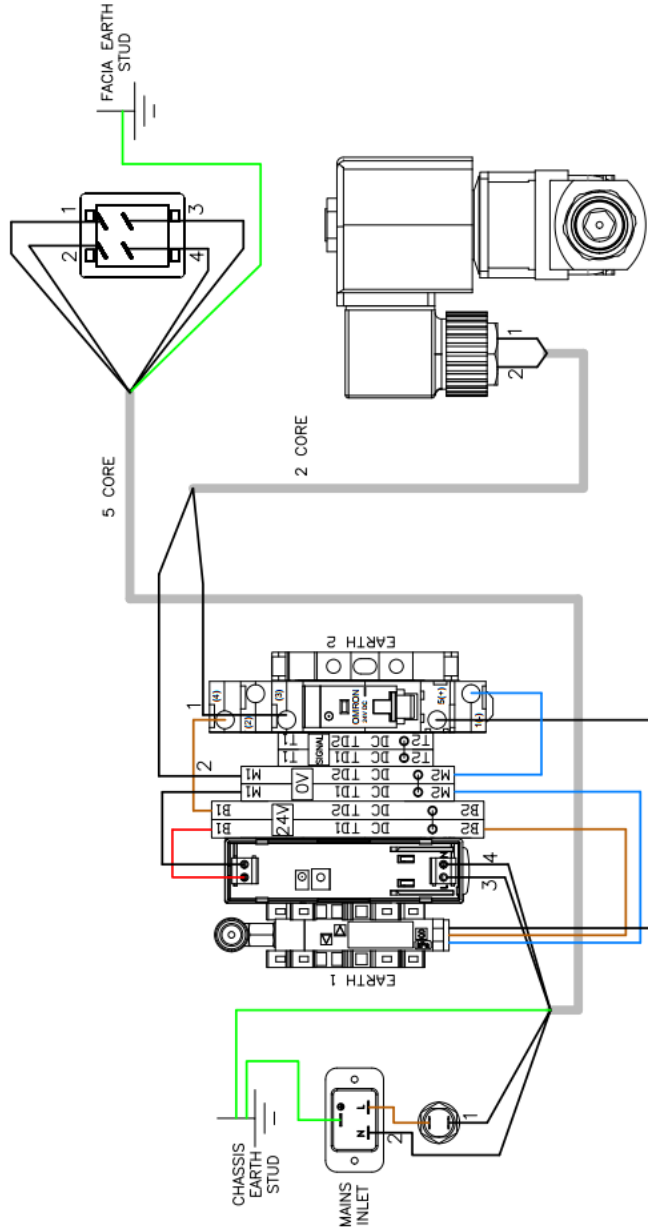
# Infinity 50\* User Manual

## Infinity 5080 Pneumatic Schematic Rev 1



# Infinity 50\* User Manual

## Infinity 50 Series Electrical Schematic Rev 3



WIRE DETAILS		
PART NUMBER	DESCRIPTION	COLOR
00-1458	0.5mm CSA TRI-RATED	RED
00-1459	0.5mm CSA TRI-RATED	BLACK
00-1462	1.0mm CSA TRI-RATED	BLUE
00-1463	1.0mm CSA TRI-RATED	BROWN
00-1466	1.0mm CSA TRI-RATED	GREEN/YELLOW
00-5493	2 CORE 1.5mm CSA	GREY OUTER/BLACK/BLACK
00-5525	5 CORE 1.5mm CSA	GREY OUTER/BLACK/BLACK/BLACK/BLACK/GREEN/YELLOW

## CSA Compliance Statement

CSA Group is a Nationally Recognised Testing Laboratory (NRTL) in the U.S. and an Accredited Certification Organisation (ACO) by Standards Council of Canada (SCC) in Canada. They are qualified to test to CSA Group (CSA), American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), American Society of Sanitary Engineers (ASSE), National Sanitation Foundation (NSF), Underwriters Laboratories (UL) and other standards writing bodies.

All PEAK products that are subject to the CSA directive are compliant with the CSA marking requirement. Such products are marked with the “CSA” symbol (shown below) in accordance with CSA directives.



## Supported Maintenance Plan

Infinity 5010 - 40 & 9010 - 40 series

### Introduction

The following is a guide for maintenance of the Infinity 5010-40 & 9010-40 series Nitrogen Generator as provided for by the Peak Service Plan.

**This procedure is to be performed on an annual basis.**

1. Check that the LC/MS is not in use and that it is OK to disconnect the Gas Supply. Check that the Gas Demand is turned OFF.
2. Shut the Air Supply Valve and turn the Generator OFF.
3. Remove both the side Access Panels.
4. Carefully open the RAC filter drain allowing the generator to slowly de-pressurize. Confirm that the gauges return to Zero. **Any pressure gauge that does not return to zero may be damaged and must be replaced.**



5. Replace the RAC Filter Element and re-assemble the filter.



6. Unscrew the top and bottom covers from the breathing air filter.
7. Replace the Breathing Air Filter Elements.



8. Re-assemble the breathing air filter.
9. Carefully open the Air Supply Valve and turn the Generator ON.
10. Switch the LC/MS gas demand ON.

## Service Parts List

### Service Parts List 5010-40 & 9010-40

Part Number	Description	Quantity
3302283 (00-0041*)	RAC Filter Element	1
3302280 (00-0042*)	Coalescing Element for BA Filter	1
3302281 (00-0043*)	Active Carbon Element for BA Filter	1

Element part numbers with (\*) are obsolete the 330228X part number should be ordered

## Supported Maintenance Plan

Infinity 5050 - 80 & 9050 - 80

## Introduction

The following is a guide for maintenance of the Infinity 5050-80 & 9050-80 Nitrogen Generator as provided for by the Peak Service Plan.

**This procedure is to be performed on an annual basis.**

1. Check that the LC/MS is not in use and that it is OK to disconnect the Gas Supply. Check that the Gas Demand is turned OFF.
2. Shut the Air Supply Valve and turn the Generator OFF.
3. Remove both the side Access Panels.
4. Carefully open the RAC filter drain allowing the generator to slowly de-pressurize. Confirm that the gauges return to Zero. **Any pressure gauge that does not return to zero maybe damaged and must be replaced.**



5. Replace the RAC Filter Element and re-assemble the filter.



6. Unscrew the top and bottom covers from the breathing air filter.
7. Replace the Breathing Air Filter Elements.



8. Re-assemble the breathing air filter.
9. Carefully open the Air Supply Valve and turn the Generator ON.
10. Switch the LC/MS gas demand ON.

## Service Parts List

### Service Parts List 5050-80 & 9050-80

Part Number	Description	Quantity
3302283 (00-0041*)	RAC Filter Element	1
3302280 (00-0042*)	Coalescing Element for BA Filter	2
3302281 (00-0043*)	Active Carbon Element for BA Filter	2

Element part numbers with (\*) are obsolete, the 330XXXX part number should be ordered.









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