



v1.13A



Operating Manual

Hyperion 906

High Voltage Power Supply

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Introduction

The Meech Model 906 high voltage power supply has been designed to be powered by 24V DC, they produce an adjustable output of 4 - 7kV AC.

The 906 provides AC power for any Meech AC Ioniser.



The 24V DC input voltage suits modern machinery and means that they operate independently of local mains voltage and frequency. Settings in the 906 can be adjusted with BarMaster controller. The output voltage can be adjusted from 4kV to 7kV.

Unpacking And Inspection

Your Hyperion 906 Power Supply bar was carefully packed at the factory in a container designed to protect it from accidental damage. Nevertheless, we recommend careful examination of the carton and contents for any damage.

If damage is evident, do not destroy the carton or packing material and immediately notify the carrier of a possible damage claim. Shipping claims must be made by the consignee to the delivering carrier.

Contents:

Standard



Hyperion 906 Power Unit

Options



Power Cables and Power Extension Cables - 4 Pin M8 (straight or 90° elbow) available in 1, 3 or 8m lengths.



24V DC Supply & IEC cable



BarMaster remote programmer. Allows optimisation of the output of the Hyperion 906

Input Voltage and Connection

- Installation and connection of the Hyperion 906 Power Supply must be completed by a qualified electrical engineer.

The Hyperion 906 must be grounded / earthed via the 24V supply or by direct connection to the earth stud on the case.

Installation

- The Hyperion power supplies should be mounted in ventilated enclosures or in free air space. The holes in the flange should be used for mounting, it is important that the power unit is mounted in such a way so oil or moisture from other sources cannot contaminate the power unit.
- Failure to the unit through contamination will invalidate the warranty

Ionising Equipment Connection

BEFORE MAKING ANY CONNECTIONS ENSURE THE UNIT IS DISCONNECTED FROM THE 24V SUPPLY

The 906 Hyperion power supply has 4 ionising appliance connection ports (2 on each side). Remove the lid of the Hyperion power supply by unscrewing the two retaining screws. Select the required number of ports, one per appliance, and remove the necessary amount of grommets from the ports.



Connect the item of ionising equipment by removing the lock washer and nut from the swivel connector of the appliance.



Push the connector through a port in the Hyperion power supply. Re fit the lock washer and nut to secure the appliance cable. Make sure the nut is fully tightened.



Remove the Black plastic thumb screw and place the appliance cable eyelet over the stud.

If you are adding more than one appliance repeat the stages 2-4 before screwing the thumb screw back on top of the stud securing the Eyelets in place and making the electrical connection.

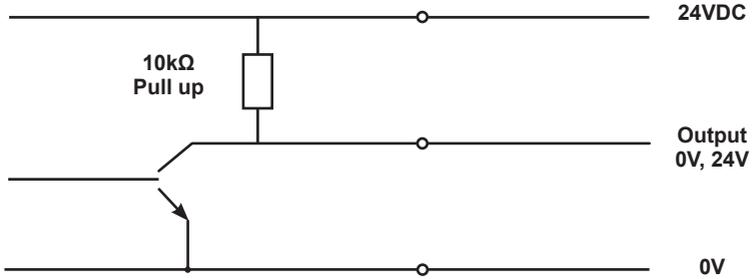


Before Re-attaching the lid using the two screws removed in stage 1 make sure all of the nuts are fully tightened before the lid is attached.



24V 4 pole extension cables are available from Meech in 1, 3 and 8 meter lengths. Ensure the 24V supply is off before connecting the power cable. Once the cable is connected turn the supply back on, the LED's located on either side of the Hyperion power supply should be green. If they are not please refer to the fault finding and diagnostic check located on the next page.

PLC Wiring



Output Signal Voltage

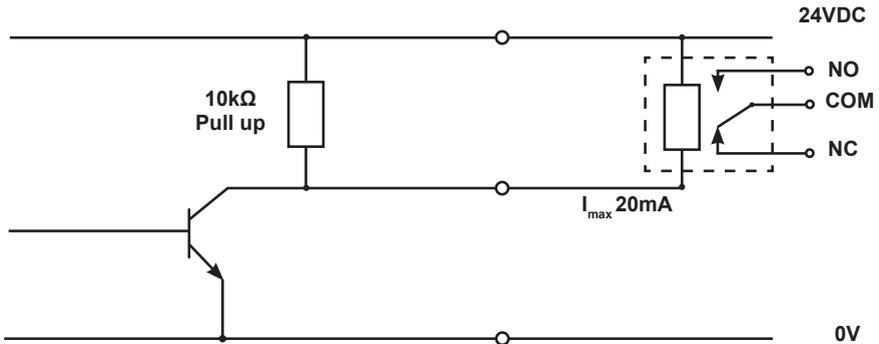
Normally Open Output Matrix

	24V Supply Power ON	24V Supply Power OFF
OK (Green LED)	24V	0V
Dirty/Faulty (Red LED)	0V	0V

Normally Closed Output Matrix

	24V Supply Power ON	24V Supply Power OFF
OK (Green LED)	0V	0V
Dirty/Faulty (Red LED)	24V	0V

External Relay Wiring



Relay Power

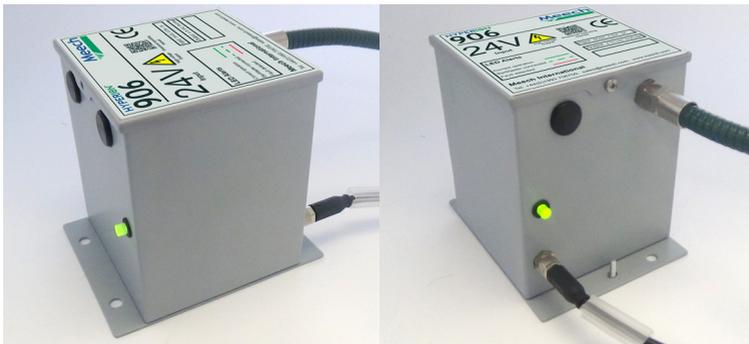
Normally Open Output Matrix

	24V Supply Power ON	24V Supply Power OFF
OK (Green LED)	OFF	OFF
Dirty/Faulty (Red LED)	ON	OFF

Normally Closed Output Matrix

	24V Supply Power ON	24V Supply Power OFF
OK (Green LED)	ON	OFF
Dirty/Faulty (Red LED)	OFF	OFF

Fault finding and diagnostic check



To ensure that the state of the power unit can be seen at any angle, the 906 has twin LED indicators. Their colour and state show whether the system is operating correctly or whether it needs attention. The meaning of the colours and states is as follows:

Colour	State	906
Green	Continuous	OK
Green	Flashing slow (1Hz)	BarMaster connected
Red	Continuous	HT failure

Technical Characteristics

Material of Construction	Painted Steel
Size	92mm x 118mm x 110mm WxDxH
Weight	2.2kg
Input Voltage	24V DC - N.B. Supply must be grounded.
Input Current	200mA-2A Load Dependant
Output Voltage	4000-7000V AC
Output Frequency	67Hz
Connection	Murr 4pin M8, Earth terminal
Settings Control	BarMaster
Output Signal	24V Output resistance 10k Ω
Local Indication	Twin Green/Red LEDs

Barmaster Programmer Connection



The BarMaster is connected in line with the 906's power supply cable. The power cable is connected to the BarMaster and, in turn, its cable is connected to the Hyperion 906 Unit.

Warning: It is recommended to turn-off the 24V power supply to the power unit and wait a few seconds before disconnecting the power cable from the bar. Failure to do so will not damage the equipment, but may result in a small shock caused by the stored energy in the bar.

Attach the cable on the BarMaster to the M8 connector on the power unit, then connect the M8 connector from the power supply to the BarMaster.

Switch on the power supply. After a few seconds, the BarMaster will establish a connection to the bar and display the bars settings and status.

The display on the BarMaster will show data including:

Model No and Software version	E.g. 906 V1.01
Serial No	XXXXXX
Voltage	4000V-7000V

Controls

The flashing cursor can be moved to the parameter to be adjusted.

- To scroll through the menu use the up down function.



- To adjust Voltage or Frequency, use left and right function



- Please note the OK button in the centre of the toggle is redundant and has no function on the BarMaster.



Adjustments



Frequency

Your Hyperion 906 Power Unit is set to a default frequency that provides good performance across its operating range. Lower frequencies can assist long-range use. Higher frequencies give better results at short-range.

Output Voltage: 4kV - 7kV

Using a BarMaster programmer it is possible to set the output voltage of the 906 to suit any Meech Ioniser. This makes the unit truly universal and removes the need to stock different models for different ionisers.

Maintenance

The only maintenance required is that the exterior of the power supply should be cleaned regularly to keep it free from dust and other contaminants.

Disconnecting Bar Master

Warning: It is recommended to turn-off the 24V power supply to the BarMaster and wait a few seconds before disconnecting the power cable from the power unit. Failure to do so will not damage the equipment, but may result in a small shock caused by the stored energy in the power unit.

Reconnect the 24V supply cable to the power unit and turn the power supply on. The power unit will operate at the new settings.

Repairs And Warranty

The Hyperion power supplies are warranted by Meech Static Eliminators Ltd to the original purchaser against defects in the material and workmanship for two years after shipment. Should any malfunction occur, please return the power supply directly to Meech Static Eliminators or your local distributor. All products returned to the factory MUST be accompanied by a return authorisation number and must be shipped prepaid. For prompt service, ship the unit to the factory with the return authorisation number shown clearly on the label. Be sure it is well packed in a sturdy carton with shock absorbing material.

Include a note stating the nature of the problem as specifically as possible, and also include instructions for returning the power supply to you. We will pay one-way return surface shipping costs on any repairs covered under the warranty.

Field repairs should not be undertaken under the warranty period. Repair attempts by unqualified personnel will invalidate the warranty.

CE Approval

A CE Declaration of Conformity for this product exists in respect of the Low Voltage Directive:72/23/EEC (“LVD”) & Electromagnetic Compatibility Directive: 89/336/EEC (“EMCD”)



Health and Safety

Emission of Ozone: Considerably below international standard of 0.1ppm

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