



# Operating Manual

**MODEL 994IML**

**Static Generator**



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## Introduction

The Meech 994IML High voltage generator has been designed to work with the Hydra In-Mould Label pinning system. It provides 0-20kV, Negative polarity, in a lightweight package, powered by 24VDC

Full local and remote control makes it ideal for systems integrators, OEMs and end users alike.

# Inspection

The Model 994-IML was carefully packed at our factory 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. In addition, please also notify Meech International of any damage claims that may be made against the delivery carrier.

## Contents:

Included with the Model 994IML

1. Instruction Manual



2. DC power plug, 2.1mm ID



3. 3.5mm mono jack plug for remote on/off



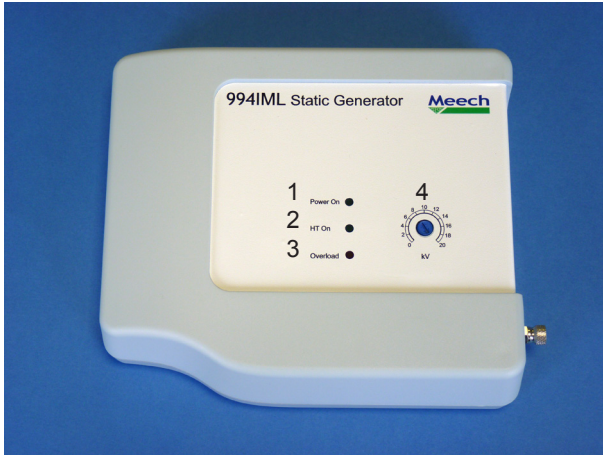
## Options

1. Min din control cable, 2000mm



# Features

## Front Panel



- |              |                           |
|--------------|---------------------------|
| 1. Power LED | 3. Overload LED           |
| 2. HT On LED | 4. Rotary Voltage Control |

## Side Panel

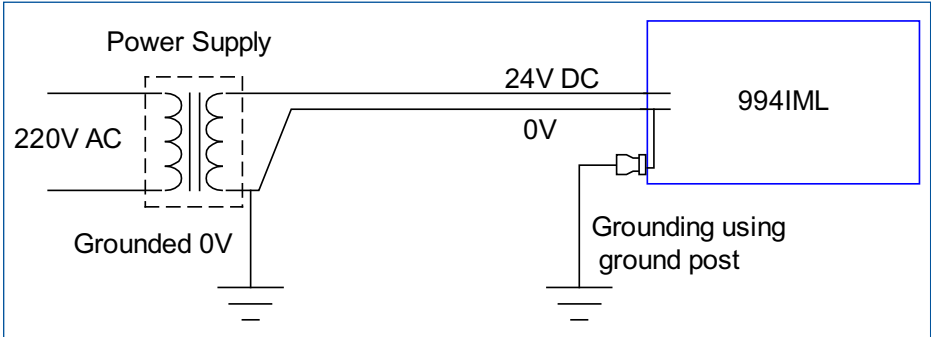


- |                                  |                                     |
|----------------------------------|-------------------------------------|
| 1. Ground post                   | 4. 8 Way Mini DIN Control interface |
| 2. On/Off Switch                 | 5. Remote On/Off.                   |
| 3. 24V DC Inlet. Centre Positive | 6. HT Outputs.                      |

# Installation

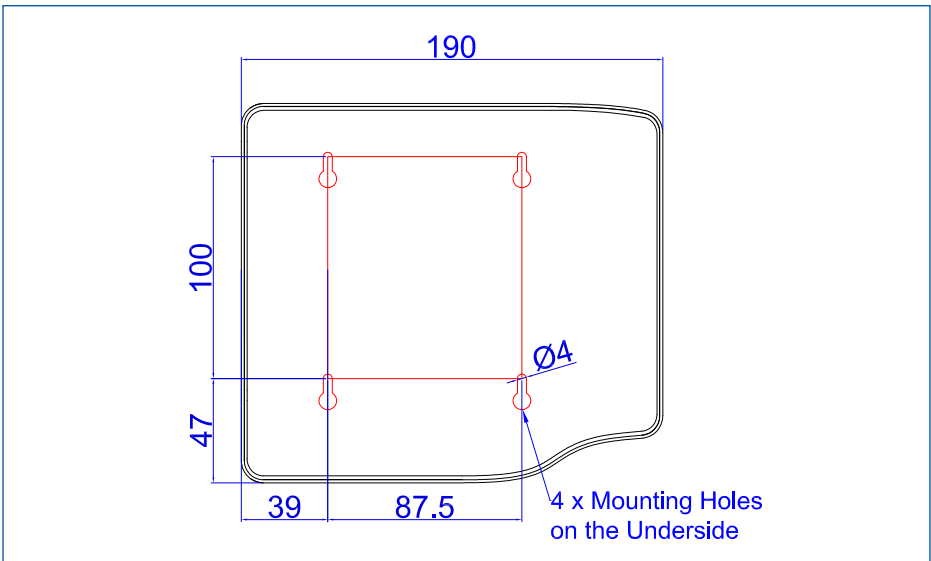
Important.

The 994 IML must be electrically grounded. Failure to do so will damage the unit. Grounding can be achieved either by using the ground post or by using a grounded 24V supply or both.



# Mounting

Mount the unit using the 5mm keyhole mounts on the rear face in a dry, well ventilated area. Allow sufficient space for the cables on the right hand side of the unit.





# Input/ Output Connections

## Ground post

To avoid damage, the 994IML must be grounded. Whether or not the electrical supply is grounded (see page 6), it is strongly recommended that the 994IML should be grounded using this post.

## Power Supply

2.1mm. Centre positive. 24V. A plug with solder terminals is supplied for the customer's use.

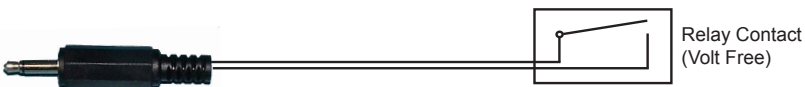
## HT Outputs

Connect the Hydra pinning system to the HT output using the proprietary grey HT connector. Ensure the plug is securely fastened using the locking collar. If only one HT output is used, the unused output should be blanked off with the plug provided



## Remote On/Off

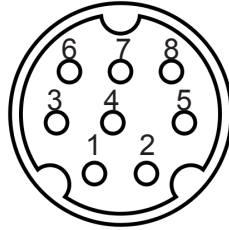
The output of the 977HL can be turned on and off remotely via the socket located on the connection panel. A 3.5mm Jack plug, supplied with the unit, connected to volt-free contacts will allow the 977HL to be switched on when the contacts are made.



Note that the unit can also be turned on and off remotely via the Mini Din connection.

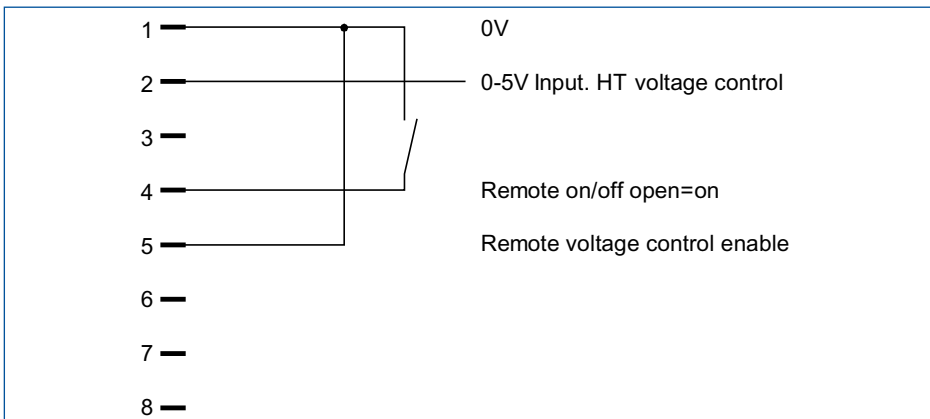
# Output / Input Signals

The 8 Way Mini DIN connector offers the following connections:



Connection	Cable Colour	I/O	Function
1	Black	-	0V Ground
2	Brown	Input	Voltage control 0-5V = 0-20kV
3	Red	Output	Output voltage setting 0-5V = 0-20kV
4	Orange	Input	Remote ON/OFF. OFF when grounded (Io)
5	Yellow	Input	Remote voltage control enabled when grounded (Io)
6	Green	Output	Output current 0-5V = 0-500µA
7	Blue	Output	5V if unit output is overloaded
8	Purple	Output	5V when HT On

Typical wiring of mini DIN cable for Remote on/off and HT voltage control.



# Using the 994IML

The 994IML can be used very simply with local control of the voltage and monitored using the front panel LEDs. For more sophisticated installations, the output voltage can be controlled via a 0-5 Volt analogue input. Remote monitoring of the output voltage and current is also provided by 0-5V analogue outputs. The state of the HT output is reported via a 5V signal.

In-built protection circuitry will prevent the output from exceeding 500mA, by limiting the output voltage. When the protection is in operation the front panel LED will illuminate and the 5V output signal will activate.

# Specification

Dimensions	215 x 170 x 46mm (W x H x D)
Weight	500g
Supply	24VDC, 750 mA Max
Output Voltage	0 - 20kV Negative
Max Output Current	500microAmps

# CE Approval



An EC 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”)

# Maintenance

The only maintenance required is that the exterior of the Model 994-IML Static Generator should be cleaned regularly with a dry cloth to keep it free from dust and other contaminants.

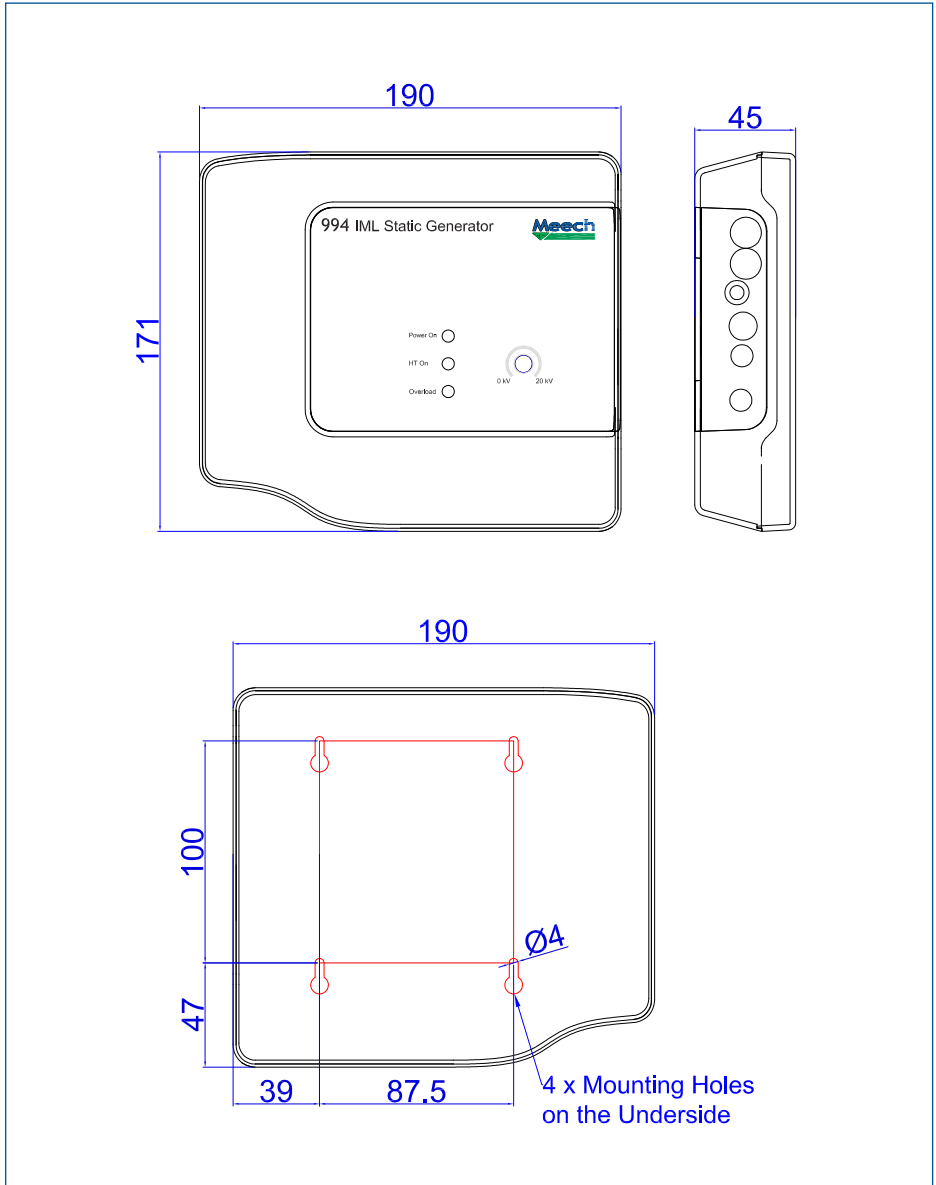
# Repairs And Warranty

The 994-IML Static Generator is warranted by Meech Static Eliminators Ltd to the original purchaser against defects in material and workmanship for one year after purchase. Should any malfunction occur, please return the unit 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 unit to you. We will pay one-way return surface shipping costs on any repairs covered under the warranty.

Field repairs should never be undertaken. Attempts by unqualified personnel to repair the unit will invalidate the warranty.

# 994-IML Static Generator Case and Mounting Detail







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