



7097 STATIC WAND



Fraser static control equipment has been designed to give you many years of productive service. However, the science of static control has unique rules which must be followed to allow the equipment to give a good return on your investment. Please read the following operating and maintenance instructions carefully.

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1. Introduction

The Fraser 7097 Static Wand is a hand-held charging electrode used in conjunction with the Fraser IONFIX Compact Static Generator.

Before you install and use this equipment, please follow the installation instructions carefully for maximum benefit.

1.1. Features and Benefits

The 7097 is used for low volume in-moulding-labelling and other applications where a temporary and versatile source of static charge is needed

1.2. Checking on Delivered Equipment

Before starting the installation please check that the 7097 Wand has not been damaged in transit. If the packaging material is damaged please report this immediately to the vendor.

Check that the additional items are present:

Tungsten Emitter

ESD Wrist Strap

Explanation of Symbols

Throughout this manual the following symbols are used to draw attention to important information.



Warning: This symbol refers to operations which, if carried out improperly, may result in serious personal injuries.



Caution: This symbol refers to operations which, if carried out improperly, may result in damage to property.



Information: This symbol refers to information which relates to obtaining the best performance and operating life from the product.

2. Safety

Do not touch the metal tip of the Wand when the high voltage is ON - there is a risk of becoming charged.

When using the Wand it is strongly recommended to wear the anti-static wrist strap which will stop the operator`s body becoming charged. The wrist strap should be connected to a good earth through the crocodile clip or 4 mm bayonet plug.

The wand is only approved for use with Fraser IONFIX generators.

It is rated for operation at up to 30 kV. Do not connect the wand to a generator capable of producing more than 30 kV.

Ensure that the generator is correctly earthed before use.

Always switch off the generator before connecting or disconnecting the wand.

Always check the wand and the cables connecting the wand to the generator for damage and security before use. If the wand or cables are at all damaged, do not use the wand. Risk of electric shock!

The tip of the wand is necessarily sharp. Handle with care.

Keep the wand dry, clean and oil-free. If the wand becomes contaminated, turn off the generator before cleaning.

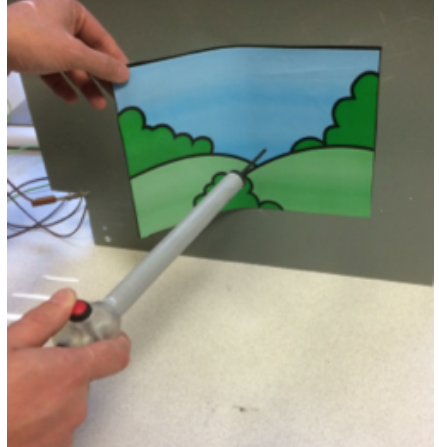
3. Operation

It is essential that the operating instructions for the IONFIX Generator are read and understood before operating this product.

The emitter has been supplied separately - prior to connecting to the IONFIX Generator, push the emitter into the socket at the end of the body.

Operation is very simple - the switch on the wand controls the high voltage. The operator holds the label against the inside of the tool, holds the 7097 about 50 mm away and presses the button for about one second, or as long as it takes to cover the label. The result is that the label is stuck to the metal.

The 7097 comes with 3m of protected high voltage cable - more can be specified at time of order. A low voltage cable is connected to the D socket on the IONFIX, which allows the switch on the Wand to turn the high voltage on when it is depressed.



When the 25-way D-type connector from the wand is plugged into the socket on the generator, the 'REMOTE' LED indicator on the front panel will illuminate. This shows that the button on the wand will control whether the HV output is ON or OFF.

When the button on the wand is pressed, the 'HV' LED indicator will illuminate to show that the HV output is active. The 'SP' (set point) next to the voltage and current settings on the display will change to 'OP' (operating) and the actual output values will be displayed. If the front panel 'RUN' button is pressed, the high voltage will be ON as long as it remains pressed. When the button is released, the high voltage will be switched off.

To adjust the voltage setpoint and current limit, use the '+' and '-' buttons on the front panel of the generator. A voltage of 20-25 kV is typical - some experimentation may be required to achieve the best setting. The current limit should be set at about 0.02 mA.

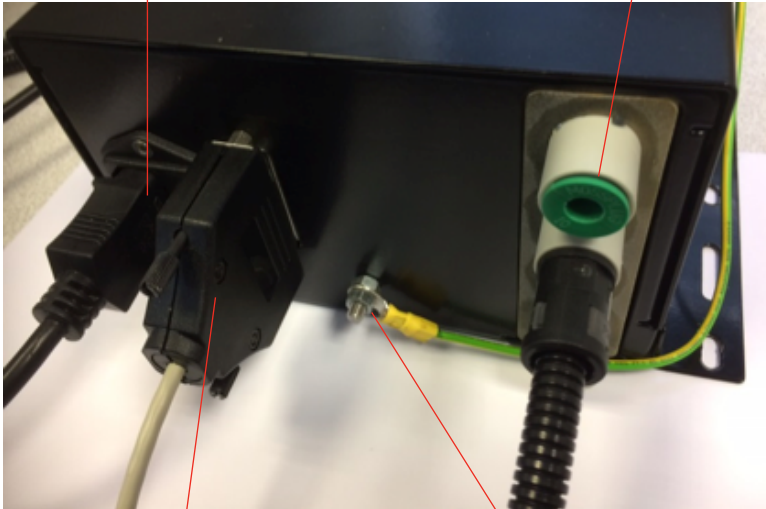


4. Electrical Connections

The Static Wand has two connections to the IONFIX Compact - the high voltage connector and the ready-made D Connector. When the D connector is plugged into its socket in the back of the generator, this activates the remote operation - the momentary switch on the handle of the Static Wand. The high voltage only runs when the switch is depressed.

85 - 264 V AC or 24 VDC, according to model.

High Voltage cable connector.
Use any port and keep the others covered.



D Connector for Wand or remote operation

Connection to good earth.

5. Maintenance



WARNING: Always switch off the generator before connecting or disconnecting the wand.
Warning triangle.

Cleaning and replacing the emitter is the only maintenance required. Dirt or damage to the emitter will reduce effectiveness and result in unsatisfactory performance.

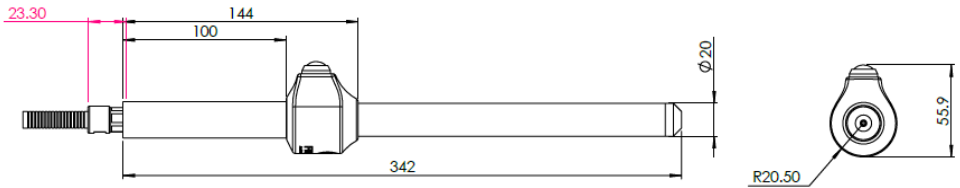
The frequency of cleaning and replacing the emitter will depend on the process and the environment in which the 7097 is used.

The tip of the wand is necessarily sharp. Handle with care.

The emitter should be cleaned using a nylon brush (Fraser part number 81217).

6. Technical Specification

Size:	Body: 342 mm
Weight:	200g.
Emitter:	2.1 mm \varnothing , available in various lengths.
Safety:	Coupled to HV with 100 MOhm. Other values are available.
Material:	Body: GRP (Glass Reinforced Plastic). Emitter Holder: Stainless Steel. Emitter Pin: Tungsten
Temperature:	60°C.
Cable:	3m of 60kV Cable. Longer lengths can be specified at time of order.
Generator:	IONFIX



7. Accessories

 A grey cylindrical replacement emitter with a black tip and a small black cap.	Replacement Emitter	709310
 A blue coiled ESD wrist strap with a blue plastic buckle and a metal clip.	ESD Wrist strap	81340
 A black plastic cleaning brush with a handle and a base of white nylon bristles.	Nylon Cleaning Brush	81217

For more information about static and to view the full range
of our products, please visit www.fraser-antistatic.com



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