

## **Le Maitre® Ltd**

# G-Force 2

## **Operating Manual**

High Continuous Output Capability

Quieter Smoke Output Performance

New Digital Control Panel with Memory

Built in DMX – Built in Freezefog Connection

Built in Pre-Delay for Freezefog use

Single Pipe, Large Mass Heat Exchanger

Optional, Variable, 200W Fan Drive Output

## **Safety and Cautions**

All electro-mechanical machines have the ability to cause injury, either mechanically or electrically. The user should be fully aware of the correct operational procedures involved in the use of this machine, and should feel comfortable about being in control of it.

All users should make themselves aware of any national or local restrictions to the use of these types of machines in applications involving public venues or areas.

Users should be aware of all regulations and advice on the use of Smoke and Haze machines.

The safe employment of this machine is strictly the responsibility of the user.

As with all vaporiser principle machines, exit nozzles will be very hot and capable of causing burns. Please take note of the warning labels. Do not touch or obstruct these nozzles.

Under adverse conditions, tiny particles of hot fluid could issue close to the machine – Never aim at persons or allow such operating conditions to occur, and maintain a 3m safety clearance.

There are ventilation holes at the rear, and on the top of the machine, these should not be covered or obstructed. Similarly the fan inlet hole on the back of the machine should not be covered and should be allowed enough air space to operate effectively.

The machine should be electrically earthed, and should never be operated or connected to an unsafe supply.

The machine should not be connected to a 'noisy' or spike laden power supply.

Spilled fluid or splashed fluid droplets can be a slip hazard. Comply with regulations when clearing or disposing of fluid.

Take note of any warning/advice notices attached to the fluid containers. Do not operate the machine with any covers removed.

The machine should not be operated with smoke recycling through the ventilation system, as this could cause electronic failure.

### **G-Force 2 Specifications**

Power Source Requirements 230VAC 2200W 50Hz, 110VAC 1700W 60Hz

External Fusing 12AT ceramic, 20AT ceramic

Internal Fusing 500mA PCB transformer

Fluid Capacity Detachable 5 Litres Bottle Carrier

Control Manual or DMX

DMX 512 3 channels Output, Smoke On delay,

Aux Fan

Typical Smoke Output 550 m³/min. 250 m³/min continuous

Machine Dimensions L41 W29 H20

Weight (Fluid Not Included) 12Kgms

#### Fluid Use

Only Le Maitre® Ltd Smoke Fluids should be used. Use of other fluid may cause incorrect operation and could cause toxicity issues.

Replacing fluid merely requires the changing the empty bottle for a new one. Use the screw lid to seal the used bottle and dispose of correctly. Re filling the empty bottle is not advised as this can lead to the introduction of foreign particles which may reduce the efficiency of the external in-line filter. If it is felt that there is a reduction in the performance of the machine then this filter should be checked and cleaned. Never operate the machine with this filter removed.

Any spillage should be cleaned away. The fluid does not require anything other than a water based cleanser.

THE G-Force 2 should not be run without fluid for any length of time as this will cause pump failure.

Fluid pump Priming should be performed at the maximum smoke output, to ensure a quick and air lock free process.

#### **Operating Environment**

The G-Force 2 is an electromechanical assembly containing electronic and mechanical devices. All such devices have reduced life spans under adverse temperature and humidity conditions.

It is always wise to minimize 'risky' operating environments, and provide the machine with similar conditions as would be applicable to any other electronic apparatus.

Good conditions include.

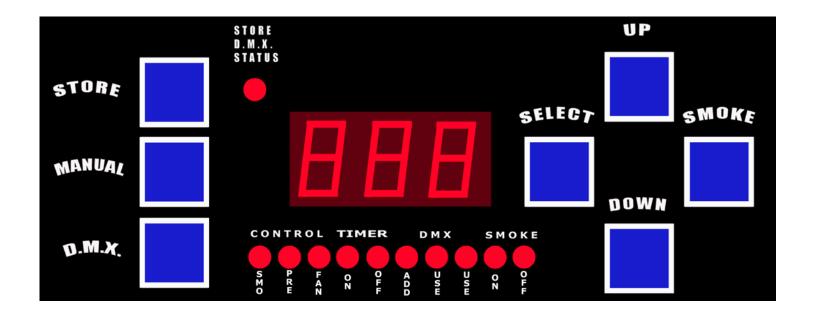
Dry – Free from dust etc – stable – non vibrating – non flammable surroundings – well ventilated – 'normal temperature' - non smoke recirculation area.

## <u>IMPORTANT</u>

Major problems will occur if the G-Force 2 is left in areas where there is no air circulation and drawing its own issued smoke directly back into the machine. If the machine has to be installed in situations such as this, it is strongly advised that an auxiliary fan is used to ensure air flow around the machine and to prevent ingress of the machines own smoke.

### **Operation Instructions**

All features are adjusted and set up using the main control panel.



The 'SELECT' button will sequentially cycle through all the adjustable controls.

'Up' and 'Down' buttons will adjust the setting. If held down, they will auto step.

Pressing 'Manual' and 'Store' together will memorise the setting for when the G-Force 2 is next switched on.

The 'Store/DMX' led reacts and blinks when a new value is stored.

The 'Smoke' on/off setting is stored along with the Smoke Output data.

### **CONTROL**

Smoke Output : 0 – 99% variation

Smoke Pre – Delay : Time in seconds before actual smoke issue (FreezeFog use)

Fan : 0 - 99% phase control for Optional Fan control output.

<u>TIMER</u>

On : Timer for Smoke Issue or select not used

Off : Timer for Interval of non smoke issue or select not used.

**DMX** 

Dmx : Selects the base DMX address

Use : option to use the next address for Pre-Delay or not

Use : option to use the next address for Fan Control

**SMOKE** : This button is a separate function switch and will control

the smoke output regardless of the 'Selection' position.

The 'DMX' and 'MANUAL' buttons switch between these two modes of operation. It may be necessary to hold either of these buttons down a short while, so that the software loop is given time to react, particularly if in the DMX mode with no actual signal.

The 'Store/DMX' led reacts and blinks if DMX is selected when there is no signal. It will remain solid if a DMX signal is present.

How to set the DMX mode of operation as standard from 'power on' - Disconnect all DMX signal leads from the G-Force 2. Select DMX mode and the status LED should be blinking. Now press the DMX and STORE buttons and wait for the Status LED to blink quickly several times. Check by turning the machine Off then On again. DMX mode should now be set. To revert to Manual use, just press the Manual button.

In DMX mode, the SELECT switch does not function, and all control is via DMX. If 'DOF' appears on the display, then a proper DMX signal is not being received. Selecting 'SMOKE' before switching to DMX will allow the display to show a response to the connected DMX signal data variation.

By setting (in manual mode), the USE DMX channels to 'NO', these channels can be used by other equipment without affecting the G-Force 2.

To restore Manual mode operation from switch on, just press Manual and Store buttons and wait for the status LED to blink.

When heating from cold (approx 6 minutes for maximum performance), the display will indicate 'Heating up' and the heat exchanger temperature until the minimum working temperature is reached. (R.T.O. in approx 4 minutes)

At this point, if the Select position is on SMOKE, and the output is set to maximum, then the actual available output will be indicated.

At the SMOKE display position, the left LED digit 'bars' will indicate three levels of heat exchanger temperature. Low = 1 bar, Medium = 2 bars, High = 3 bars. At the 'settling' temperature, at which maximum performance is available, the horizontal and vertical bars will flash alternately.

### Warranty

The Le Maitre® Ltd G-Force 2 is sold with a one year's warranty, which includes parts and labour from the date of purchase. This warranty covers manufacturing defects, providing that the unit has been regularly serviced by an authorised agent and has only used genuine Le Maitre® fluid.

Le Maitre® Ltd considers all of its products to be safe for use in the application it was intended. Le Maitre® Ltd takes no responsibility for misuse or incorrect use. Always refer to the equipment owner's manual for proper use, and be aware of local legislation governing the products use.