

Le Maitre Ltd



Fake Flame

Instruction Manual

Safety Notes:

The 'Fake Flame' is designated as Professional Apparatus and should only be used by qualified personnel. When in use, or if the device is still hot, the 'Fake Flame' should not be accessible to any non qualified personnel.

This machine should never be used in such a manner that, in the event of a failure, injury could result.

This machine should be electrically maintained and soundly EARTHED at all times.

Always isolate from the Mains supply before exposing any of the internal electronic devices. Voltages present could be potentially Lethal or cause serious injury.

The lighting bar containing the lamps can reach temperatures in excess of 80C and should be allowed to cool before touching, and not be accessible such that injury or burns could result.

The low voltage vapour producing tube inside the machine reaches very high temperatures and should not be touched whilst operating or for at least 5 minutes after switching off.

This machine is extremely heavy and requires professional handling in moving or transportation. Relevant handling precautions should be observed.

Any positions of use other than that of secure floor standing will be the responsibility of the user and under any circumstances should not be mounted in a hazardous position.

The fluid used for the creation of the vapour should only be of Le Maitre Ltd manufacture. Alternative fluids could cause damage to, or create hazardous vapour. Toxicity free vapour output is the responsibility of the user.

Do not stand on, or rely on the physical strength of this machine for any reason whatsoever.

Always maintain a supply of fluid – although the unit can survive hours of use before damage, continual use without fluid will cause failure of the pump priming mechanism.

There could be further notes regarding the safe use of this machine relating to Health and Safety issues in force and local government requirements not established at the time of printing. This does not infer that these regulations need not be met or do not apply. Always be aware of applicable and current regulations.

Electrical Connections and Power Requirements

This machine may be a 220/240 or 110 volt device. Check the relevant markings and only use with the appropriate supply source.

The machine power requirement is 1 KW and the light bar requirement is 750W
Please make sure that this power is safely available and that appropriate fuses are fitted to the supply connectors.

UK wiring colour coding is..

Brown wire	LIVE
Blue wire	NEUTRAL
Green/Yellow	EARTH.

Total Power Requirement 230V 50Hz 1.75KW (6Amp)

Operation, Adjustment and Options.

Before use the Fake Flame will require the installation of 2.5ltrs of the chosen vapour fluid into the main body of the unit. In order to self contain and seal the unit such that vapour only emits from the 'flame' exit point, the fluid bottle retaining cover is screwed into position. To insert the bottle it will be necessary to remove these cover retaining screws. A low torque battery screwdriver is best employed.

If this is a replacement bottle, then the light bar will have to be lifted free of the main unit.

The light bar should be allowed to cool before being removed for safety reasons and longevity of the lamps

Sliding it to one side will allow the bar to be lifted in order to release the secured side.

Attach the supply feed tube via the attached bottle cap to the bottle and slide the bottle in at an angle. Push it forward into its retaining area such that when the lid is replaced the bottle is prevented from moving backwards or up and down.

It is always best to run the machine and inspect for correct vapour issue before re-attaching the cover plate, in case the vapour tube needs cleaning or replacing.

(See maintenance document). Do not touch this tube whilst in operation, since it operates at a very high temperature and could cause burns.

If this is the first bottle, or the machine has been run dry of fluid, then a short period will be required for the fluid pump to prime the fluid through the system.

On the right hand side of the machine, and through the air vent cover, a red LED will be observed to flash as the tube cycles through its operation.

If all is established as being correct, and vapour is cleanly issuing from the 'vapour tube', the unit can be switched off and the cover plate re secured.

The machine will require initial assembly of the light bar onto the main body of the Fake Flame. Before doing so, the coloured filter strips can be secured by their silicon rubber retaining loops to each end tube of the bar. This method of filtering allows the user to adjust colour height within the flame projection area, as well as fitting any other colours as desired.

A static dichroic filter bar will be available as an accessory.

The light bar can then be attached to the main unit by sliding one end into the retaining bracket on the main chassis, aligning the other end with the second bracket, and sliding the bar such that both brackets secure the bar. If necessary, retaining brackets could be fitted.

The main unit and light bar have separate power supply connections so that the lights can be controlled externally if required.

The Fake flame projects coloured light onto a swirling screen of vapour in order to create a very realistic artificial flame. It is the nature of the swirling vapour which will determine just how visually effective this is. Two air flow adjustments are fairly critical in their settings and should be experimented with in order to achieve the desired effect. The main control panel has two rotary fan speed adjustments. One is for 'Agitate' control and the other for 'Output' control.

The Output control determines the rate at which the vapour will be ejected vertically from the lengthwise 'flame' strip. The vapour production inside the machine remains constant, so fast air flow will create a thin wispy screen and slow air flow will create a denser cloudy screen. (Please bear in mind that the internal machine vapour chamber has to get filled before any output actually occurs, and this may not be uniform across the flame strip until it is.)

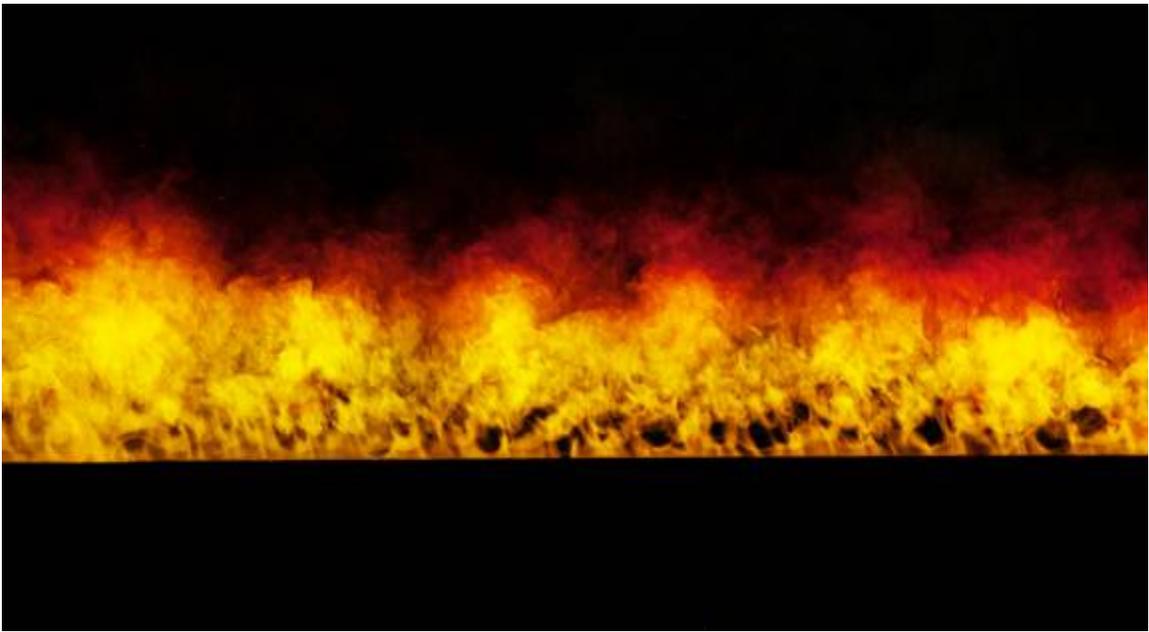
The 'Agitate' control determines the rate of air flow at an angle just shallow of 90 degrees against the vertical output. This creates a twist and twirl of the vapour along the flame strip length, thus reproducing individual vapour vortices.

As a starting point, half way settings on each control is advisable, then individual adjustment according to the desired effect and environmental conditions.

These fans can remain on at all times.

Switching the 'Vapour' screen on will now introduce the vapour into this airflow setup, after which the lamps can be switched on.

It is probably best to set the airflows for the best visual presentation of the desired effect, and then adjust the filter and light bar angle to suit. The light bar has two adjustment screws, one at each end, which can be set to increase or decrease the projection angle onto the vapour. Typical effects obtainable are shown below.



The flame effect is best viewed against a black or dark background and with the vapour screen strip at, or just above eye level.

Initially it may take a little time and some experimentation adjusting the various controls before the desired effect is achieved, as every installation will be subject to different amounts of air movement within the immediate area.

The Fake Flame system does not produce the most realistic effect in areas where air movement is present. The best results are achieved in completely still environments.

The type of fluid used to create the vapour screen can be of two types. One which disperses rapidly after emission or one which will create a lasting air haze. Sales staff at Le Maitre Ltd or their representatives will be happy to advise on this issue.

A 2.5 ltr bottle of fluid should give in the order of 60Hrs run time, although this can vary according to various parameters. Running out of fluid will not cause immediate problems, but it is not advisable to run continually without fluid as this may well damage the fluid pumps ability to prime correctly.

At fluid change over, it is advisable to check that the exchanger tube which produces the vapour within the machine is operating correctly. It may need periodically cleaning or changing, and fluid refill is the best time to check this. (Maintenance or Service Manual will give greater details)

An LED, visible through the right hand air inlet on the control side of the machine, will be seen to flash on and off, as the vapour section goes through the normal thermal cycling.

Should this LED either not do so, or pause in the off state followed by a set number of brief flashes, the Fake Flame should be referred to Service.

Lamps used in the Fake Flame have a typical life stated to be in the order of 2000Hrs. This will vary according to working conditions, voltage levels, vibration and temperature etc.

Depending upon the supply voltage these lamps may be wired in series, parallel or series / parallel formats. In parallel mode, individual lamps can blow without affecting others. In series mode, all lamps will be affected if just one lamp blows. In series/parallel mode one lamp in a group of five will affect all five lamps in that group. Should a lamp require replacing, it should be replaced with an identical specification device. Nominally this is 24V 75W narrow angle, but should always be checked against the marking on lamps actually fitted.