

Neutron Pro Operations Manual



Please Read Carefully Before Operating

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Introduction

Capture beams of light with a translucent haze. The Neutron Pro Hazer, rewrites the book on haze technology. Le Maitre's patented Sequentially tracked Auto Reissue technology generates an environment of translucent haze without the use of a compressor or heating block, providing a virtually silent operation with instant effect.

The haze is generated without the use of oil, eliminating any residue associated with cracked oil effects.



Silent operation combined with continuous output, optional DMX and remote control places the Neutron Pro in a class of its own.

Features

- Whisper Quiet Operation
- Continuous Haze Output
- 1 Gallon of fluid lasts 160 Hours
- Micro-Processor Controlled
- DMX Interface (Optional)
- Integrated Fan
- Remote Control (Optional)
- Instant Effect
- Patented S.T.A.R. Technology

Warning

IMPORTANT SAFETY INSTRUCTIONS
Do not touch or place hands, expose skin,
within 10 cm. of discharge nozzle.
SAVE THESE INSTRUCTIONS
READ THESE IMPORTANT SAFETY INSTRUCTIONS

WARNING
READ THESE IMPORTANT SAFETY INSTRUCTIONS
Do not remove the outer case until power has been
disconnected from the machine

READ THESE IMPORTANT SAFETY INSTRUCTIONS
Persons suffering from asthma or allergenic
sensitivity may experience irritation, discomfort, or
allergic symptoms when exposed to heated
fog effects

WARNING
Ensure that this unit is grounded at all times.
Failure to do so may result in serious injury.

WARNING
Never use alternative fluids. Toxicity free output
is your responsibility.

M.S.D.S. Available by request or at www.lemaitrefx.com

Technical Specifications

Model: Neutron Pro Hazer with S.T.A.R. Technology

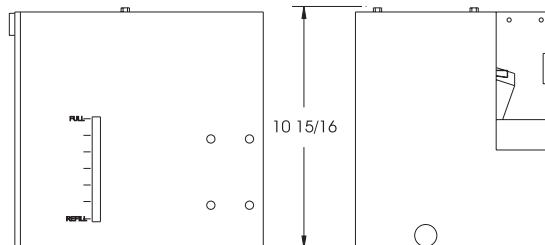
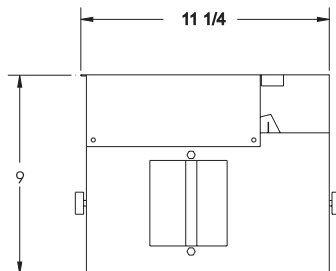
Type: Water Base Haze Generating System

Dimensions: Length: 67 cm. / 11.25 "
Width: 28.5 cm. / 9 "
Height: 33 cm. / 10.94 "

Weight with Fluid: 11 Kg. / 23.75 lbs.

Power Rating: 115VAC 60HZ 3.15A

Neutron Pro Illustration



Operating Procedure

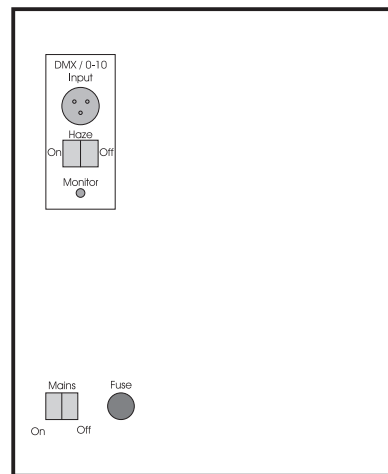
The machine should be fitted with a 2 litre Le Maitre 'Neutron Pro' Hazer fluid container.

The use of any other fluid will lead to damage of the 'Hazing Element' .

Remove the main cover by releasing the two thumb screws, situated rear top and front lower and sliding the cover forward, up and out.

- 1.) Place the bottle securely into the machine and remove its sealing cap. Insert the fluid feed pipe and secure the fluid cap, making sure that the air vent in the cap is clear from obstruction.
- 2.) Plug the machine into a suitable main power supply. Set the 'Mains' switch to the **On** position, located on the rear panel. The 'Mains' switch will illuminate to indicate the presence of 'Mains' power and the internal fan will start to operate.

- 3.) Set the 'Haze' switch to the **On** position, located on the rear panel.
The 'Monitor' led should now begin to flash indicating that the initial auto cleanse phase has commenced. After approximately 30 seconds Hazing will commence.



Neutron Rear Panel

Please note , if the 'Neutron Pro' Hazer shut down cycle has not been allowed then it is possible that small amounts of fluid will be ejected during the auto cleanse phase.

- 4.) It will now be necessary to 'Prime' fluid into the system to expel any air that might be present. This is done automatically and can take up to eight minutes if fluid feed pipe is empty.
- 5.) Once the 'Neutron Pro' is primed haze vapour will automatically be issued in a cycling fashion. The slower flash rate of the 'Monitor' led indicates the actual output cycle. The cycling effect of the haze issue allows for uniform dispersion of the haze effect.
- 6.) To stop haze issue, set the 'Haze' switch to the **Off** position. The 'Neutron Pro' will **not** immediately stop issuing haze, but will enter into an additional auto cleanse phase. After this period the 'Neutron Pro' will shut down, and the 'Monitor' led will stop flashing, however the internal fan will continue to operate until the 'Mains' switch is set to the **Off** position.

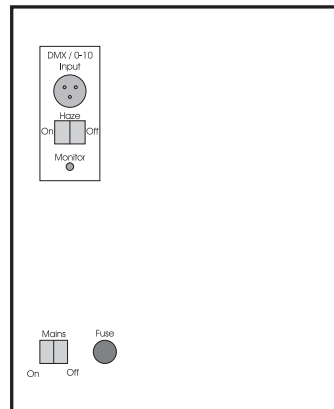
Remote and External Control Features

Neutron Remote

In addition to onboard controls, available for the Neutron Pro, is a hand held Standard Remote Control with On/Off capabilities.

The Neutron Remote (Part # **CLF 2415**) is available for applications where the Neutron Pro will be controlled from a remote location. To use the Neutron Remote simply follow the directions below:

- 1.) Select the **Off** position on the 'Haze' switch, located on the rear panel of the Neutron Pro.
- 2.) Ensure the power to the Neutron is off, by selecting **Off** at the 'Mains' switch.



Neutron Rear Panel

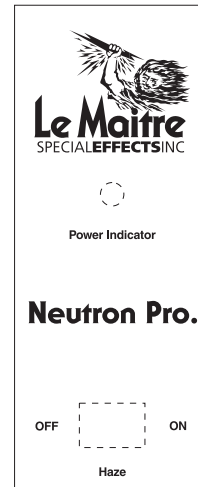
- 3.) Connect the remote cable connector to the 3 pin XLR located on the rear panel of the Neutron Pro.
- 4.) Power up the Neutron by selecting **On** at the 'Mains' switch.
- 5.) The Power Indicator on the Neutron Remote should be illuminated at this time.

Note

The Power Indicator remains illuminated as long as the Neutron Remote is receiving power, it does not duplicate the flashing of the 'Monitor' Led.

- 6.) Start haze output by selecting **On** at the 'Haze' switch on the Neutron Remote.

Service Note



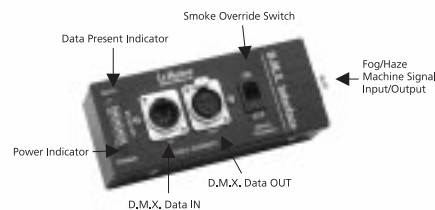
Pinout for 3 Pin XLR

Neutron Remote Illustration

- Pin 1 - Remote Signal
- Pin 2 - GND
- Pin 3 - +12V

D.M.X. Interface

The D.M.X. Interface (Part # **CLF 3320**) will allow D.M.X. 512 Protocol to activate the Haze output of the Neutron Pro Haze machine.



See the publication included with the D.M.X. Interface for operating instructions.

Maintenance

Service Note

Should there be a continuous rapid 'flash' of the led, first check the 'Hazing Element' plug is correctly fitted, and then switch the 'Neutron Pro' hazer main power off then back on again to reset the fail mechanism. If this fails to rectify the rapid 'Monitor' led flashing then you should call your Le Maitre dealer for service.

This following will outline the suggested schedule and procedure for maintaining your Neutron Pro processing coil, including a proper "Power Down" procedure which must be followed to ensure the performance of your Neutron Pro Hazer.

Important Note

The following "Power Down" procedure **MUST** be followed each time the power to the Neutron Pro is turned off:

- 1.) Turn the "Haze" switch to the **OFF** position to initiate the cleansing cycle.
- 2.) The cleansing cycle will begin clearing the processing coil of unprocessed fluids. The monitor light will continue to flash until the cleansing cycle has ended, at which time the monitor light will go out.
- 3.) The "Mains" power switch can now be turned to the **OFF** position.
- 4.) The "Power Down" procedure is complete.



A routine maintenance program is essential for the optimum performance of your Neutron Pro Hazer. We recommend that the coil maintenance program be applied at least every 25 hours of use, or when a noticeable decrease in output is observed. More frequent maintenance will result in superior trouble free operation.

To make your maintenance regime more convenient and effective, a Neutron Cleaning Kit is available from your Le Maitre dealer. Included in this kit are extra abrasors, cleaning solution, and a spare Processing Coil. To order this kit use Part # **CXP 2459**.

Warning !

Make certain the power cord is unplugged when servicing this unit. Failure to disconnect may result in fatal electric shock, fire, or injury to persons.

To avoid possible burns allow sufficient time for the unit to cool.

- 1.) Disconnect power by unplugging unit from main power supply.



Knob Fastener



Knob Fastener

- 2.) Remove top cover by loosening knob fasteners counter clockwise.
- 3.) After removing top cover by sliding towards the front and upwards, the lid will locate into notch and lift away. Locate the Abrazor tool from behind label, and remove.

4.) Remove service port cover to allow easy access to the processing coil. **Service Port**



5.) Support the processing coil with one hand by simply grasping it firmly near the end of the tube where the haze exits. With abrazor tool in hand, guide it through the service port into the processing coil with a twisting motion. The burrs on the Abrazor will "de-scale" the walls, resulting in a rejuvenated processing coil. Be very careful not to **push** the abrazor into the processing coil as this will result in the Abrazor breaking.

Grip to support

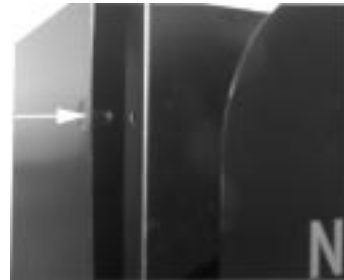


A twisting motion will ensure less force being applied to the tool.

Tech tip

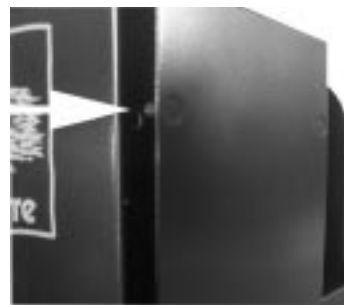
For a better grip on the Abrazor tool, a few turns of electrical tape gives a better grip of the cleaning tool.

Alignment Studs



6.) The unit is now ready to reassemble. Take note of the alignment studs when assembling the lid. Tighten knob fasteners.

Alignment Studs



7.) The maintenance is complete.

Recommended Fluids

Neutron Water Based Haze Fluid

The Le Maitre water based Neutron Haze Fluid provides a translucent long lasting, dry haze effect that leaves no residue. For use only in the Neutron product range only.

Warning!!
Never use "Regular Haze" Fluid in your Neutron

Warranty Policy

Warranty:

The Neutron Pro. Hazer has a 1 Year Parts and Labour warranty against manufactured defect only. If the Hazing Element Coil becomes plugged it will NOT be considered warranty. Proof of purchase or proof of sale must always accompany any warranty returns. An RA (return authorization) number must be noted on the outside of any box returned to our facilities. **Any packages without a clearly marked RA number will not be accepted by our receiving department.** Proper maintenance and shut down procedure must be followed to ensure Hazing performance. Should your Hazing Element Coil become plugged a cleaning procedure can be administered.

Freight on warranty items are freight prepaid to our facility and we will prepay freight back to your facility after repair, by the most economical means available. Should you require the item express-returned, then you are responsible for any difference in freight cost.

Return Policy:

Return of any product must be done within 30 days of purchase. The package must be returned freight prepaid and the RA number clearly marked on the outside of the box. A restocking charge of up to 25% may be levied. Only credits are issued to the dealers account. Any product not returned within 30 days is considered purchased.

Warning:

Le Maitre Special Effects Inc. considers all it's product to be safe for use in the application it was intended. Le Maitre Special Effects takes no responsibility for misuse or incorrect use. Always refer to equipment owners manual for proper use.

Safety Precautions

1. Ensure that operation of the machine is supervised by suitably trained and authorised personnel.
2. Do not modify the machine or use a machine which has been damaged in any way.
3. Allow sufficient air circulation around the machine at all times.
4. Protect the Neutron Pro from direct weather effects and wet training procedures.
5. Only use fluids recommended by the Manufacturer.
6. Do not continue to produce haze output in an enclosed area when visibility is reduced below 50cm.

7. Avoid direct haze output continuously at persons, structure or objects within close proximity of the discharge nozzle.
8. Ensure that adequate exhausting arrangements are available in the event of an emergency.
9. Do not place hands, or exposed skin within the first 10cm of the discharge nozzle at any time during haze production.

Accessories

Listed below are accessories available for your Neutron Pro through your Le Maitre dealer.

Model	Description
CLF 2415	Neutron Pro. Remote
CLF 3320	DMX Interface
CLF 2420	Neutron Road Case
CXP 2460	Replacement Coil
CXP 2459	Neutron Coil Cleaning Kit (includes replacement coil)

Notes