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Note: Please read entire manual before operating the Power Fogger Industrial
Introduction
The Power Fogger Industrial 9D is a Microprocessor Controlled, Water Based Fog generating system.

Microprocessor Control
The Power Fog Industrial 9D (PFI-9D) features dual microprocessor control. From temperature regulation to taper back flow control, all of the functions are monitored and processed by the two on-board processors.

Water Base Fog Technology
Water Base Fog technology is achieved by pumping a glycol/water mixture through a heat exchanger. This will vaporize the fluid as it passes through the processing block. The vaporization of the fluid forces the hot mixture through the output nozzle. When mixed with ambient air, it forms an opaque aerosol (fog). The fog is made up of tiny droplets that form around small particles in the air. The suspended droplets refract the light, allowing the fog to take on the color of the light illuminating it.

Warning
Important Safety Instructions:
1. Do not touch, place hands or expose skin within 20” (50 cm) of the discharge nozzle.
2. Do not remove the outer case.
3. Persons suffering from asthma or allergenic sensitivity may experience irritation, discomfort or allergic symptoms when exposed to fog effects.
4. Ensure that this unit is grounded at all times. Failure to do so may result in serious injury.
5. Use Ultratec Special Effects fluid ONLY.

Safety Precautions
1. Ensure that any operation of the machine is supervised by suitably trained and authorized 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 machine from direct weather effects and wet locations.
5. Only use fluids manufactured by Ultratec Special Effects.
6. Do not continue to produce fog when visibility is reduced to 20” 50cm or below.
7. Avoid directing fog output continuously at people, structures 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 20” (50 cm) of the discharge nozzle at any time during fog production.
10. Fog effects can trigger smoke alarms and detectors. Please take suitable precautions to prevent false alarms.
PFI Technical Specifications

Model: Power Fog Industrial 9D (PFI-9D)
Part Number:
- CLF 4460 Power Fog Industrial 9D (PFI-9D) - 120 Volt
- CLF 4456 Power Fog Industrial 9D (PFI-9D) - 120 Volt - w/ Air Option
- CLF 4461 Power Fog Industrial 9D (PFI-9D) - 220-240 Volt
- CLF 4457 Power Fog Industrial 9D (PFI-9D) - 220-240 Volt - w/ Air Option

Power Rating:
- 120 Volt A.C. 50/60 Hz. 13 Amps.
- 220-240 Volt A.C. 50/60 Hz. 6.5 Amps.

Fluid: Water Base Fog Fluid (Use only Ultratec Fluid)

PFI Technical Drawings
Power Fogger Industrial 9D
Operating Procedure

1. The fog machine must be connected to a grounded supply of at least 15 amps free of any electrical interference.

2. Open a 4L or 20 Litre (5 Gallon) container of Ultratec Special Effects fog fluid and insert the fluid pickup tube into the spout of the fluid container.

3. Connect the Remote Handset into the rear panel connector located on the rear panel. (When using DMX the Remote is not required).

4. Activate the Power switch located on the rear panel. The Power switch and Handset indicator will illuminate to indicate the presence of power. If the Handset indicator does not illuminate, ensure the connector is properly inserted.

5. The Handset indicator will begin to flash slowly, but will speed up when the fog machine is ready to operate. After approximately 9 minutes, the fog machine will be fully heated and is ready for full output; the indicator will be on solid.

6. It may be necessary to prime fluid into the system to expel any air. The Variflow control on the remote handset should be set to the full position. A dry hose can take between 45-60 seconds to prime. This only needs to be done if the unit was left to run dry.

   NOTE: In order to prime the fog machine, the Handset Indicator must be a solid red which indicates that the fog machine is fully heated.

7. To adjust the depth of the hose, simply loosen Nut ‘A’ and slide up or down the hose and retighten. Be careful not to pinch off the flow of fluid.

Operating Procedure w/ Air Option

A) Mount the Regulator Bracket to a wall or other secure location.

B) Attach the female coupler to the male coupler of the Power Fog Industrial w/ Air Option or Power Fog Industrial 9D w/ Air Option.

C) Attach the air hose to the male coupler of the mounted regulator.

D) Adjust for the desired air pressure (typically 25-50 psi).
Options

Remotes - The Show Control Remote and Timer/ Duration Remote are compatible with the Power Fog Industrial, Power Fog Industrial w/ Air Option, Power Fog Industrial 9D and Power Fog Industrial 9D w/ Air Option. Each remote is sold separately.

Jug Holder - The Power Fog Industrial 9D and Power Fog Industrial 9D w/ Air Option has been designed to be versatile in any setting. For ease of operation, a jug holder may be used to secure the fluid to the machine. The Jug Holder is sold separately.

4” Hose Adapter - If your intention is to connect a 4” hose to the machine and direct the fog elsewhere, a 4” Hose Adapter (CXP 1046) is available. This adapter is compatible with the Power Fog Industrial, Power Fog Industrial w/ Air Option, Power Fog Industrial 9D and Power Fog Industrial 9D w/ Air Option.

Optional Show Control Remote Operations

The Show Control Remote Handset was designed to indicate operation modes. These are as follows:

Show Control Remote LED Indicator

Slow Flashing Light: Indicates unit is not ready to operate but still in heating mode, fog is not available at this point.

Quick Flashing Light: Indicates unit is ready to operate but still in heating mode, some fog is available at this point.

Solid Light: Indicates that the unit is ready to fog at full output.

No Light: Indicates problems; a loss of power or remote is not connected. If these fail to correct the problem, contact your local Ultratec Special Effects dealer.
Show Control Operation

Show control is achieved by connecting a “Dry” or zero voltage contact to the show control terminals. The Power Fog Industrial requires no power to signal the fog, only one set of contacts that close for the entire fogging cue.

For Show Control Operation, the DMX Address must be set on 555. Closing the Show Control Remote terminals with dry contacts, triggers the following machine functions:

- C + 1 = On/ Off w/ Variflow
- C + 2 = LSG On
- C + 3 = Air Option

Optional Timer/ Duration Remote Operations

The Timer/ Duration Remote offers Duration, Interval, Variflow and fog on/ off controls.

Timer/ Duration Remote LED Indicator

The Timer/ Duration Remote Handset was designed to indicate operation modes. These are as follows:

**Slow Flashing Light:** Indicates unit is not ready to operate but still in heating mode, fog is not available at this point.

**Quick Flashing Light:** Indicates unit is ready to operate but still in heating mode, some fog is available at this point.

**Solid Light:** Indicates that the unit is ready to fog at full output.

**No Light:** Indicates problems; a loss of power or remote is not connected. If these fail to correct the problem, contact your local Ultratec Special Effects dealer.

**Note:** To operate the LSG MK II using the Timer/ Duration Remote, the DMX Address must be set on 555 and the Duration control set over 50%. If the Duration is set at anything less than 50%, the Switched Power Port will be off. The Interval Knob works in the same fashion for machines equipped with the Air Option. The Show Control Remote and Timer/ Duration Remote cable may be extended from the machine and operated effectively away from the Power Fog Industrial. The maximum recommended cable length is 225 Feet.
DMX Operation

The Power Fog Industrial is equipped with DMX controls as a standard feature.

1. Attach a DMX signal to the DMX IN 5 pin connector on the rear of the unit. A terminator may be required on the DMX OUT connector in some applications.

2. Select a valid DMX address on the thumbwheel selector for the base address of the fogger. If an air option is present 3 consecutive address will be required. Base DMX= fog rate controlled 0-100%, DMX+1=LSG power on above 50%, and DMX+2= air on above 50%.

3. Valid DMX LED is on solid if good DMX signal is present. DMX control overrides hand remotes. Slow or irregular flashing indicates poor DMX data. A steady flashing indicates factory test mode and DMX switches were in the 600-699 range at power-up. Reset switches to required address and cycle the main power switch.

Maintenance

Exterior

The casing of the PFI is stainless steel with a powder paint coating. To clean simply wash with mild soap and warm water.

Heat Exchanger

Using high quality Ultratec Special Effects fluid should result in a long heat exchanger life. (See warranty policy outlined on the last page of this document).

Recommended Fluid

Director's Choice Fog Fluid: The choice of professionals. Director's Choice creates a cloud of fog with a medium hang time while remaining clean, white, dry, and odorless.

Pro Beam Long Lasting Fog Fluid: With a hang time 2-3x greater than the Director's Choice Fog Fluid, the Pro Beam solution produces a slightly less white fog while remaining clean, dry, and odorless.

Quick Dissipating Fog Fluid: This fast dissipating fluid is great for applications or effects that require quick dissipation of fog. It produces excellent steam effects that resemble nitrogen bursts and it also keeps low-lying fog from rising too quickly when it is used with the LSG or LSX.

Extra Quick Dissipating Fog Fluid: Dissipates 2x the rate of Quick Dissipating Fog Fluid while maintaining similar characteristics.

Molecular Fog Fluid: A faster dissipation versus the Director's Choice Fog Fluid. This thick, clean, white fog is an optimal solution for a dense low-lying fog effect when chilled with the LSG or LSX machines.

Party Fog Fluid: Quality fog fluid on a budget. An excellent solution for DJs, Nightclubs, Haunted Houses etc., looking to enhance light beams and creating various smoke effects.

Maxi Fog Fluid: The perfect balance between price and performance. Maxi Fog is the ideal solution for those who require high volume without compromise.

Maintenance Fluid

EZ Kleen Preventative Maintenance Fluid: Using EZ Kleen preventative maintenance fluid on a regular basis ensures longer life for the heat exchanger in Ultratec fog machines by reducing blockage.

All of our Fog Fluids are water based. Damage will occur if Haze Fluid is used in the Power Fogger Industrial & Power Fog Industrial 9D.
## Warranty

<table>
<thead>
<tr>
<th>Warranty:</th>
<th>Hardware products come with a one year warranty on parts and labor. Unless stated otherwise, this will refer to manufacturer defects only. All warranty is based on destination of the original sale. Any additional costs incurred are the responsibility of the Dealer and/ or the customer. Abuse or poor maintenance is not accepted. Proof of purchase or proof of sale must always accompany all warranty returns. An RA (Return Authorization) number must be noted on the outside of each box being returned to our facility. Any package(s) without an RA number clearly marked, will not be accepted by our receiving department. Freight on warranty items are freight prepaid to our facility and we will prepay freight back to your facility following repair. This will be done by the most economical means available. Should you require the item express returned, the dealer is responsible for request indication and any difference in freight cost. Export Distributors are required to carry out the warranty repair, parts will be supplied by Ultratec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return Policy:</td>
<td>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.</td>
</tr>
<tr>
<td>Warning:</td>
<td>Ultratec Special Effects considers all of it’s product to be safe for use in the application it was intended. Ultratec Special Effects takes no responsibility for misuse or incorrect use. Always refer to the Product Manual for proper use.</td>
</tr>
</tbody>
</table>

## Contact Information

### Head Office
Ultratec Special Effects
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London, Ontario N6H 5L9

Direct: 519-659-7972
Toll Free: 866-534-5557
Fax: 519-659-7713

### Europe Office
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60314 Frankfurt am Main
Germany

Direct: 49-69-87-000-1850
Fax: 49-69-87-000-1899

### Canadian Shipping Address
(For All Canadian Repairs)
Ultratec Special Effects
1960 Blue Heron Drive
London, Ontario N6H 5L9

### USA Shipping Address
(For All USA Repairs)
Ultratec Special Effects
640 Gadson Street
Groveland, Florida 34736

Please remember to include the **RA Number on all items being shipped for repairs.**

To retrieve an RA Number visit www.ultratecfx.com and click on the “Service” section. Then click on “Return Authorization Request” which is located on the left hand side of the page.

If you have any questions or require assistance please contact service at 519-951-3357/866-534-5557 or by email at Service@Ultratecfx.com.