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VFOG
VERTI FOG
MACHINE



ORDER CODE: FOG04

High Performance Fogger HP-4D USER MANUAL

WARNING

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

**CAUTION!**

**Keep this equipment away from rain,
moisture and liquids.**

**SAFETY INSTRUCTIONS**

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual



**CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**



Before your initial start-up, please make sure that there is no damage caused during transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.

Please note that damages caused by user modifications to this equipment are not subject to warranty.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not connect this equipment to a dimmer-pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.**
- **WARRANTY;** One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Incorrect operation may lead to danger e.g.: short-circuit, burns, electric shocks, lamp failure etc.

Do not endanger your own safety and the safety of others!
Incorrect installation or use can cause serious damage to people and property.

Danger of Burns

- This machine is for adult use only and must be installed out of the reach of children. Never leave the unit running unattended.
- The fog machine output is very hot. Avoid coming within 60cm of the output nozzle during operation.
- Locate the fog machine in a well-ventilated area. Never cover the unit's vents. In order to guarantee adequate ventilation, allow a free air space of at least 20cm around the sides and top of the unit.
- Never aim the output nozzle at open flames.
- The output nozzle becomes very hot during operation (200°C). Keep flammable materials at least 50cm away from the nozzle.
- Always allow your fog machine to cool down before attempting to clean it.

Danger of Explosion

- Use only high-quality, water based fog fluid that your dealer recommends. Other fog fluids may cause clogging or "spitting".
- If your fog machine fails to work properly, discontinue use immediately. Drain all fog fluid from the tank, pack the unit securely (preferably in the original packaging material) and return it to your dealer for service.
- Never drink fog fluid. If it is ingested, call a doctor immediately. If the fluid comes into contact with skin or eyes, rinse thoroughly with water.

Note: Pay attention to all warning labels and instructions printed on the exterior of the fog machine

Set up

- Remove all packing materials from the shipping carton. Check that all foam and plastic padding is removed, especially around the nozzle.
- Place the fog machine on a flat surface and remove the fog fluid tank cap.
- Fill with high quality, water based fog fluid recommended by your dealer. Any other types of fluid can damage the unit resulting in spitting and serious clogging. When filled, place the cap back on the fluid tank. Be careful not to exceed the maximum fluid level. **DO NOT OVERFILL.**
- Firmly attach the remote control module cable to the connector on the rear of the machine.

Introduction:

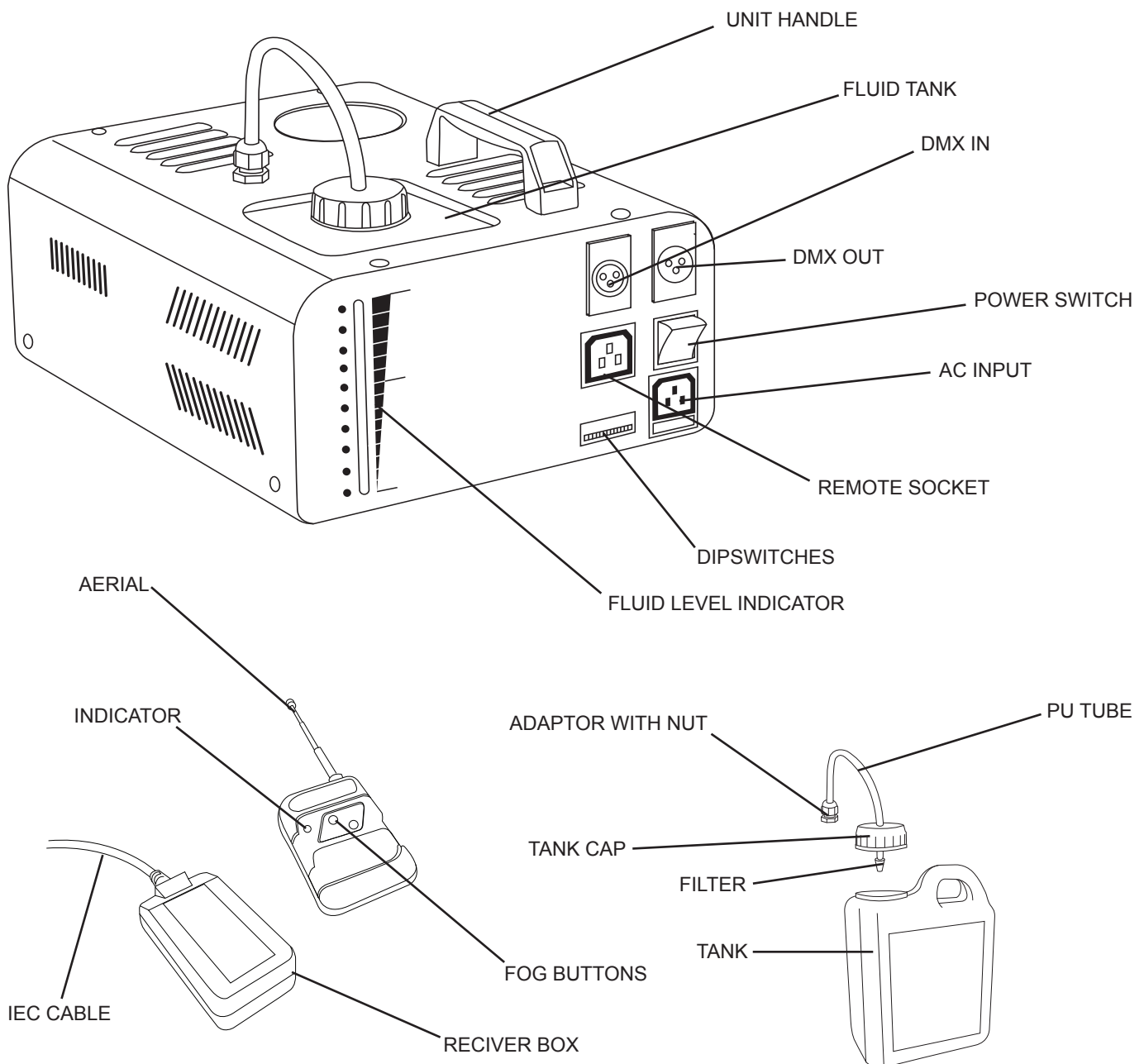
The Verti Fog takes fog to a new Height! This new fogger fires straight up in the air leaving the fog just where you want it. This high firing fogger creates a thick cloud of smoke that naturally falls from the ceiling to the floor. Outputting 20,000 cubic feet per minute this vertical volcano produces enough fog to cover any stage, nightclub or dance floor. Fluid is provided from a 1.5 ltr tank and initial warm up only takes around 5 minutes.

Operation

- Add fluid carefully to the liquid tank. Do not overfill the tank.
- Plug the remote control into the socket marked remote control on the back of the machine.
- Plug the power cable into a grounded electrical socket. Turn the power switch to ON at the back of the machine. The unit will take a few minutes to warm up the heater, during this time the machine will not generate fog.
- To emit fog press the button on the remote.

Important: Always monitor the tank fluid level as you are fogging. Running a fog machine with no fluid can permanently damage the unit.

Overview



Performance Note

- All fog machines develop condensation around the output nozzle, this may result in some moisture accumulation on the surface below the output nozzle. Please consider this when installing your unit.
- All fog machines may sputter small amounts of fog occasionally during operation and for a minute or so after being turned off.
- All fog machines have a recycling period after long bursts when the machine will shut itself down for a short period in order to heat up again. During this time no fog can be produced.

Maintenance

Do not allow the fog fluid to become contaminated. Always replace the cap on the fog fluid container and the fog machine liquid tank immediately after filling.

All fog machines are prone to clogging due to the thick consistency of fog liquid and the high temperature at which it vaporizes. However, a properly maintained fog machine should provide years of reliable use.

DMX Settings

Channel A

	250-255	250-255 = Maximum Smoke Output 100%
	6-249	6-249 = Smoke Output (5% - 95%)
	0-5	0-5 = OFF

The HP-4D uses 1 channel to control smoke output. This channel has a value range of 0-255. Timer functions such as duration and interval can be programmed using the DMX controller or DMX control software.

If channel A has a value from 0 to 5, the unit is OFF

Between the values 6 to 249, the volume of fog output is regulated. With 6 being the minimum amount of fog produced and 249 approaching the maximum. The fog output rises as the DMX value is increased.

If Channel A has a value from 250 to 255, the machine will operate at maximum output.

Note: In the example above, if the machine were assigned the DMX address of 124, Channel A would correspond to DMX address 124

DMX Settings

Each unit occupies 1 Channel . To ensure that the control signals are properly directed to each unit, they require addressing. This is to be set for every single unit by changing the Dip Switches as set out in the table below.

The starting address is defined as the first channel from which the unit will respond to the controller.

Please make sure that you do not have any overlapping channels in order to control each unit correctly and independently from any other fixture on the DMX data link. If two, three or more units are addressed similarly, they will work similarly.

Dip-Switches Settings

Setting the DMX starting address:	DIP-switch No.	1	2	3	4	5	6	7	8	9
Device number & channels:	DMX starting address.	1	2	4	8	16	32	64	128	256

Unit 1 - channel 1	ON	▲								
	OFF		▼	▼	▼	▼	▼	▼	▼	▼

Unit 2 - channel 2	ON		▲							
	OFF	▼		▼	▼	▼	▼	▼	▼	▼

Unit 3 - channel 3	ON	▲	▲							
	OFF			▼	▼	▼	▼	▼	▼	▼

Unit 4 - channel 4	ON			▲						
	OFF	▼	▼		▼	▼	▼	▼	▼	▼

Unit 5 - channel 5	ON	▲		▲						
	OFF		▼		▼	▼	▼	▼	▼	▼

DMX-512:

- DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a data "out" terminal).

DMX Linking:

- DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DATA Cable (DMX cable) requirements (for DMX operation):

- The HP-4D can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input/output (figure 1).

Figure 1

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight dealers.

Please quote:

CABL10 – 2M

CABL11 – 5M

CABL12 – 10M

Also remember that DMX cable must be daisy chained and cannot be split.

Notice:

- Be sure to follow figures 2 & 3 when making your own cables. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behaviour.

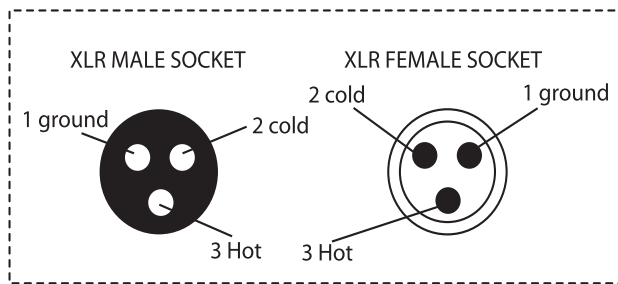
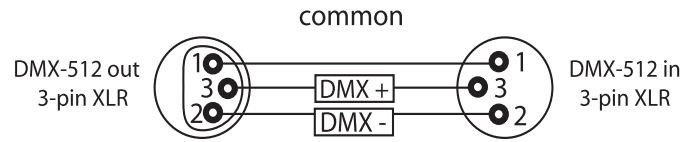


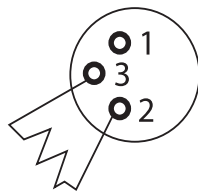
FIGURE 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Negative
Pin 3 = Postive

FIGURE 2

Special Note: Line termination:

- When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.



Termination reduces signal transmission problems and interference. it is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

Using a cable terminator (part number CABL90) will decrease the possibilities of erratic behaviour.

5-Pin XLR DMX Connectors:

- Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-Pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The chart below details the correct cable conversion.

3- Pin XLR to 5-PIN XLR Conversion		
Conductor	3-Pin XLR out	5-Pin XLR in
Ground shield	Pin 1	Pin 1
Negative (-)	Pin 2	Pin 2
Positive (+)	Pin 3	Pin 3

Specifications

Technical specifications:

- Fog Output:.....20,000 Cuft./Min
- Tank Capacity:.....1.5L
- Heater:.....1500W
- Weight:.....6.5Kgs
- Size:.....322 x 274 x 154mm