



# User Manual

Caution: Fog machines may set off smoke alarms!

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Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the enviroment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

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#### INTRODUCTION

*Introduction:* Congratulations on your purchase of one of the most reliable fog machines on the market today! The VF1600 commercial fog machine has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during usage and maintenance.

**Customer Support:** ADJ Products, LLC provides a toll free customer support line, to provide set up help and to answer any questions that may arise during set up or initial operation. You may also visit us on the web at www.adj.com for any comments or suggestions. Service Hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (323) 582-2650 Fax: (323) 582-2941 E-mail: support@adj.com

To purchase parts online visit http://parts.adj.com.

**Warning!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, as doing so will void your manufacturer's warranty. In the unlikely event your unit may require service please contact ADJ Products, LLC.

SAFETY NOTICE! NEVER POINT OR AIM A FOG MACHINE TOWARDS PEOPLE OR THEIR CLOTHING. THIS UNIT EMITS HOT VAPOR AND SHOULD BE USED WITH THE SAME CARE THAT WOULD BE OBSERVED WHEN USING AN ELECTRIC KETTLE OR AN IRON.

**Note:** Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

PLEASE recycle the shipping carton when ever possible.

#### WARRANTY

#### MANUFACTURER'S LIMITED WARRANTY

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service you must obtain a Return Authorization number (RA#) before sending back the product—please contact ADJ Products, LLC Service Department at 800-322-6337. Send the pro- duct only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintnance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear indentifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

#### **MANUFACTURER'S LIMITED WARRANTY PERIODS:**

- Lighting Products = 1-year (365 days) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- Laser Products = 90-Day Limited Warranty
- L.E.D. Products = 2-year (730 days) Limited Warranty (excluding motors, PCB boards, and power supplies, which have a 1-year (365 day Limited Warranty) and batteries which have a 180 day
- limited warranty).

# WARRANTY REGISTRATION

The VF1600 fog machine carries a one year (365 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support number.

#### SAFETY PRECAUTIONS

- In the event that the unit needs to be returned to ADJ Products, LLC for service, use only the original packaging and materials for shipping.
- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Do not spill water or other liquids into or onto your device.
- Ensure that the fog fluid is contained inside the fluid reservoir only. Do not spill fog fluid into or onto other internal components of the device.
- Ensure that the power outlet used matches the device's required voltage.
- Do not remove the cover for any reason. There are no user serviceable parts inside this device!
- Disconnect the unit from main power when left unused for long periods of time.
- Never connect this device to a dimmer pack.
- Do not attempt to operate this unit if it has been damaged in any way.
- Never operate this unit with the cover removed.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
- Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in the event of an internal short.
- Disconnect from main power before attempting to make any type of connection.
- Never block the ventilation holes, and always be sure to mount this unit in an area that will allow proper ventilation. Allow at least 6" (15cm) clearance between this device and a wall.
- · This unit is intended for indoor use only, and use of this product outdoors voids all warranties.
- Follow proper storage guidelines when storing for extended periods. See the *Proper Storage and Maintenance* section of this manual for details.
- · Always mount this unit in a safe and stable manner.
- Please route your power cord out of the path of foot traffic. Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged.
  - B. Objects have fallen onto, or liquid has been spilled into, the unit.
  - C. The unit has been exposed to rain or water.
  - D. The unit does not appear to operate normally or exhibits a marked change in performance.

#### DESCRIPTION

This device features a revolutionary new heating element that has been specifically designed to prevent excessive particle build up that can cause premature fogger failure. This fog machine has a wide-angle spray nozzle and a long-life pump, both of which have been specially designed for high performance fogger output. A removable remote control device is also included.

# DMX SET UP

**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your device. This device is available in a 120v and 220v version. Because line voltage may vary from venue to venue, you should be sure your unit voltages matches the wall outlet voltage before attempting to operate you fixture.

**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufacturers 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 manufacturers 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, try to use the shortest cable path possible when linking multiple fixtures. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line: at the beginning, at the end, or anywhere in the middle. In other words, the first fixture controlled by the controller could be the last fixture in the chain. 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.

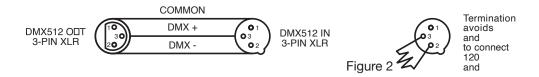
Data Cable (DMX Cable) Requirements (For DMX Operation): This device can be controlled via DMX-512 protocol, and it is a 1 channel DMX unit. The DMX address is set using the dipswitches on the rear panel of the unit. Your unit and your DMX controller require an approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable, which can be purchased at almost all professional sound and lighting stores. Your cables should be made with a male XLR connector at one end and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.

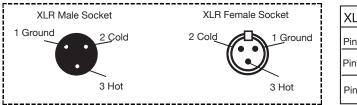


Figure 1

## DMX SET UP

**Notice:** Be sure to follow figures 2 and 3 when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come into contact with the XLR's outer casing. Ground the shield could cause a short circuit, resulting in erratic behavior.





XLR Pin Configuration	
Pin 1 = Ground	
Pin 2 = Data Compliment (negative)	
Pin 3 = Data True (positive)	

Figure 3

**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 behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of the male XLR connector (DATA+ and DATA-). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



Termination reduces signal errors and avoids 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.

Figure 4

**5-Pin XLR DMX Connectors.** Some manufacturers use 5-pin DMX-512 data cables for DATA transmission in place of 3-pin. 5-pin DMX fixtures may be implemented in a 3-pin DMX line by using a cable adaptor. These adaptors are readily available at most electronics stores. The chart below details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion							
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)					
Ground/Shield	Pin 1	Pin 1					
Data Compliment (- signal)	Pin 2	Pin 2					
Data True (+ signal)	Pin 3	Pin 3					
Not Used		Pin 4 - Do Not Use					
Not Used		Pin 5 - Do Not Use					

# **DMX TRAITS**

This device features a single DMX channel to control fog output. This allows you to control each individual fixture's traits with a standard DMX 512 controller.

- 1. To run your fixture in DMX mode, set the DMX address using the dipswitches located on the rear panel of the unit.
- 2. After you have set your DMX address, connect the fixture to any standard DMX controller using the fixture's XLR connectors. Follow the set-up specifications that come with your DMX controller.

CHANNEL	DMX VALUES	FUNCTION
		Fog Output
1	000	No Fog
	001 - 255	Fog Output, 0% to 100%

## SET UP

- 1. Open the shipping carton and carefully remove the unit from the shipping carton. Remove all the packing material from the device, paying special attention to the area around the nozzle.
- 2. Set the fog machine on a flat dry surface. Locate the included bracket from the package and attach it to the sides of the fog machine using the supplied hardware. Please note: The bracket is an optional accessory, and its usage is required when the fog machine is being installed in a suspended or hanging configuration.
- 3. Fill the fog fluid reservoir with ADJ brand fog juice only and then tighten the cap.
- 4. Firmly attach the remote control unit to the remote control socket on the rear of the unit.
- 5. Plug the unit in to a matching power supply. At this time, the fluid reservoir will glow red, indicating that the unit is heating up. Wait about eight minutes for the fogger to reach normal operating temperature. When it has reached sufficient temperature, the reservoir will glow green to indicate that the device is ready to emit fog.
- 6. To emit fog, either press the remote button, use the timer function, or use the manual button on the rear of the unit. See the *Timer Remote Operation* section of this manual for operating instructions.

## TIMER REMOTE OPERATION

Always be sure to maintain an adequate supply of ADJ Brand Fog Juice in the fluid reservoir. Running the fog machine dry will cause pump failure and or clogging. This is the largest cause of failure in fog and haze machines. We recommend use of ADJ brand fog juice only!

**VFTR Timer Remote:** Connect the remote to the fog machine. The timer function allows fog to be emitted at designated intervals. The remote has three (3) L.E.D.s that indicate different functions. **Please note that the timer function is inactive when DMX mode is activated.** 

- The YELLOW LED on the left indicates that the timer is turned on and is activated.
- The RED LED indicates continuous fogging is active.
- The GREEN LED on the right is for manual fogging. Wait for the GREEN LED to light up, then press the button for manual fogging.

The remote also features three rotary knobs:

- The Duration knob sets the timer duration (Length of fog output).
- The Interval knob sets the fog output intervals (Length between fog output bursts).
- The Output knob sets the amount of fog the machine will output.

**Caution:** Before removing or replacing the remote control unit, disconnect the power supply.

**Wireless Remote Control:** This device can also be operated by wireless remote. Plug the receiver box into the wireless input, and locate the four numbered dip switches on the side of the receiver. Select any dip switch and flip it to the ON position. The numbered button on the remote that corresponds to the selected dip switch will now control fog output. For example, if dip switch #3 is set to the ON position, then button 3 on the wireless remote will control fog output.

## **FUSE REPLACEMENT**

Disconnect the unit from its power source, then remove the power cord from the unit. Once the cord has been removed, locate the fuse holder inside the power socket. Insert a flat-head screw driver into the power socket and gently pry out the fuse holder. Remove the bad fuse and replace with a new one. Please note that the fuse holder also has a holder for a spare fuse.

# STORAGE AND MAINTENANCE

Store your device only in a cool area, and cover the device to prevent dust buildup. When storing for long periods of time, it is highly advised to at least run the device every 3-4 months, as long periods of inactivity can severely shorten the operational life. Only run water based fog juice through your device. Never run plain water, vinegar, or any other liquid solution through your device, as running anything other then water based fog juice will cause severe damage.

#### TROUBLE SHOOTING

If you experience low fog output, pump noise, or no fog output at all, disconnect the device from power and discontinue use immediately. Do not continue to push the remote control's activation button, as this may damage the device. Check fluid level, the external fuse or breaker, and remote connection, and verify that the wall outlet is sending power. If none of these factors prove to be the cause of the problem, and the unit still fails to operate correctly, the unit may require service. Please contact customer support for further instructions. Please do not return the unit to your dealer without contacting customer support first.

# **SPECIFICATIONS**

- 1500W mobile DMX Fog Machine
- · High efficiency heater block burns through fog with less residue
- Electronic Thermo Sensing (ETS) for optimum heating levels
- LED heating indicator system in tank: Red = Heating; Green = Ready to use; Flashing = Fog fluid tank is low
- Low fog fluid shut off sensor to protect pump
- Warm-up time: 8 minutes
- Reheating Time: 15 Seconds
- Second Fog Shooting Time: Around 12 Seconds
- Output: 20,000 cubic ft. per min
- Fog fluid tank: 2.3 Liter (non-removable)
- Includes ADJ VFWR2 wireless remote control
- Includes ADJ VFTR wired timer remote control
- Fog output switch on rear panel
- 3-pin DMX In/Out
- Safety Loop
- Only use high quality, water-based fog fluid
- Dimensions (LxWxH): 19.5" x 14" x 9" / 495x355x230mm
- Weight: 22 lbs. / 10 kg.