



## VF6c Manual



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# 1. Getting Started

## What's In the Box

- 1 x Really Amazing VF6c VaporFlame Effect Unit
- 1 x Power Cord
- 1 x VF6c Manual
- 1 x VaporFlame Bleeder Hose

## “Let's Unpack That...”

Hey! Look at that! You are the proud owner of a shiny new VaporFlame fixture. You now have the power to make “fire” from water- Pretty cool huh? As you unpack your VaporFlame fixture from its shipping material make sure all the parts are present. Inspect the unit for damage that may have occurred in transport. The VaporFlame fixtures are pretty hearty, but sometimes accidents happen. Please keep the original packing material for inspection. If a fixture must be returned to the factory, it is important that it is sent in the original packing.

## Powering Up

All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

**The VaporFlame 6c requires an input voltage of 100-240 VAC**, and has an internal auto switching power supply. Be sure the input voltage applied to the fixture matches these specifications. **Irreparable damage may occur if the incorrect is voltage supplied.**

## Getting A Hold of Us

If you need more information, or something goes wrong, please **contact us at [www.vaporflame.net](http://www.vaporflame.net)**. We love talking shop and will be happy to troubleshoot any challenges with you. Really!

**Disclaimer: The information and specifications contained in this document are subject to change without notice. VaporFlame Inc. assumes no responsibility or liability for any errors or omissions that may appear in this user manual. VaporFlame Inc. reserves the right to update the existing document or to create a new document to correct any errors or omissions at any time. You can download the latest version of this document from [www.vaporflame.net](http://www.vaporflame.net).**

## 2. Safety Instructions

Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.

- ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- NEVER use any liquid other than water in the unit. ONLY clean potable water should be used. White vinegar may be added to prevent odors from forming.
- DO NOT allow water to flow into the air line. This will cause damage to the unit
- DO NOT allow water to remain in the fixture when not in use. This could cause an unpleasant odor when used or bacterial growth in the water tubes.
- In the event of an unpleasant odor the internal water tubes must be cleaned immediately.
- It is RECOMMENDED to add 2oz of white vinegar to every 5 gallons of water to clean internal water tubes.
- ALWAYS bleed remaining water from unit before storing.
- The unit must be installed in a location with adequate ventilation.
- DO NOT place objects directly in the main effect plume as they may get wet. The main plume is described as the part of the effect closest to the nozzle tip where the water has yet to atomize.
- ALWAYS secure unit and lighting fixture using separate safety chains. NEVER carry the fixture by its head. Be sure the VaporFlame is secured to its light source.
- PROTECT THE UNIT FROM FREEZING. DO NOT operate at ambient temperatures lower than 20°F (-6°C) or higher than 104°F (40°C). DO NOT allow water to remain in the unit with the unit OFF at ambient temperatures lower than 40°F (4°C).
- In the event of a serious operating problem, stop using the unit immediately. NEVER try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- NEVER connect the device to a dimmer pack. Make sure the power cord is never crimped or damaged.

**Caution!** There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact us at [www.vaporflame.net](http://www.vaporflame.net).



# 3. Meet the VF6c

## Main Features

- 5 inch to 5 foot adjustable “flame” effect
- Adjustable valves for air and water
- Safe Flame effect
- Will not wet surrounding area- (when operated correctly.)

## Product Description

The VF6c is a flame effect that attaches to the standard 7.5-inch gel frame slot on an LED Leko or Par, fixture turning a standard light into a VaporFlame effect fixture. Our most versatile fixture, the VF6c can create a range of effects from a low 5-inch flame to a 5-foot blaze and can be mounted at any angle.

No heat or flammable material makes the VaporFlame safe to use in close proximity to artists, gear, and scenic pieces.

The VF6c takes 2 channels of DMX, for individual control of the air and water output. Adjustment dials allow the user to control the fullness of the flame from the unit, creating the most realistic fake flame available.

Connected to any potable water line and air supply, the VF6c consumes only 1/4th gallon of water per hour and 1 cfm of air. VaporFlame fixtures atomize their vapor plumes so as not to collect on gear or surfaces.

Using the available adapter, the VF6c can be bolted to a Blizzard Lighting Tornado fixture.

## 4. Setup

### Attach VF6c unit to the light source- Yoke Mount. (FIGS 1 & 2)

The 6c Includes a Mounting Adapter allowing the Nozzle head to be attached to yoke of most smaller LED lighting fixtures.

1. Attach the “C” Series Adapter with the shorter end against the Nozzle Head. **FIG. 1**
2. Remove the “T” Handle on your LED fixture.
3. Place the VaporFlame “C” Series adapter between the yoke and body of your lighting fixture.
4. Tighten “T” Handle through the “C” Series adapter. **FIG. 2**

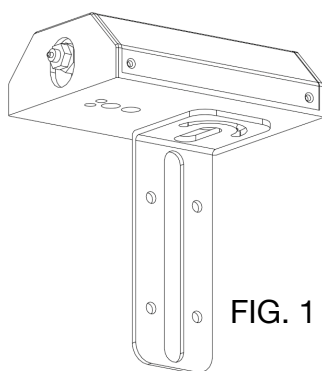


FIG. 1



FIG. 2

### Attach VF6c unit to the light source- Face Mount. (FIGS 3 & 4)

1. Attach the “C” Series Adapter with the longer end against the Nozzle Head. **FIG. 3.**
2. Attach the VaporFlame “C” Series Adapter to the face of your lighting unit using appropriate screws. **FIG. 4**

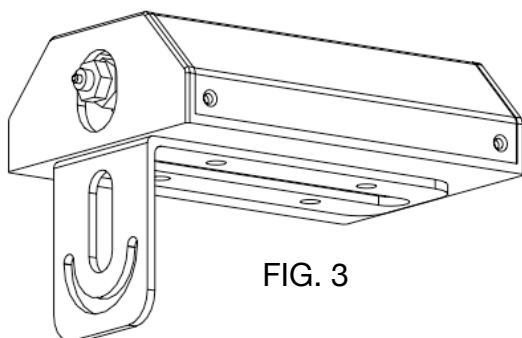


FIG. 3



FIG. 4

## Connect Power and Data to the 6c. (FIG 3)

1. The 6c is powered by the included PowerCON True1 connector.
2. “Data In” and “Data Through” are via the 5 pin DMX connectors.
3. Align the notches on the connector with the notches on the unit’s power port, push in and turn clockwise until the connector clicks into place.
4. The 6c requires an input voltage of 100-240 VAC.
5. The 6c draws 2.5 amps @110 VAC.

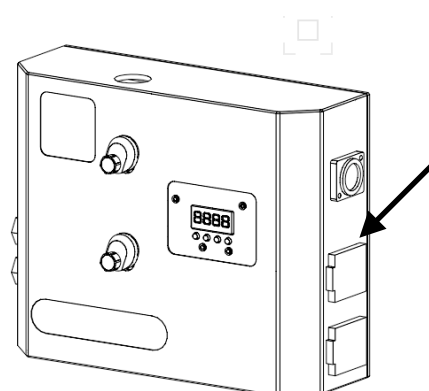


FIG. 3

## Set the DMX address. (FIG 4)

1. Choose MENU.
2. Use UP/DOWN buttons until D001 is displayed.
3. Choose ENTER
4. Use UP/DOWN to select the desired start address.
5. Choose ENTER.
6. DMX start address is now set.

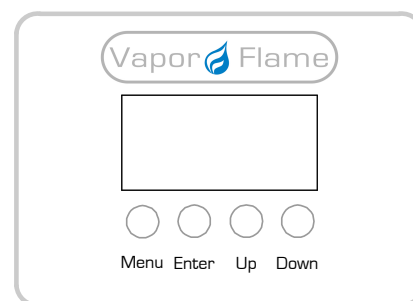
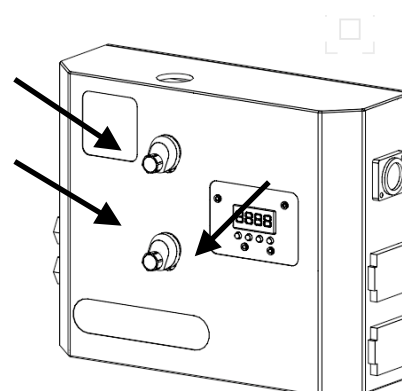


FIG. 4

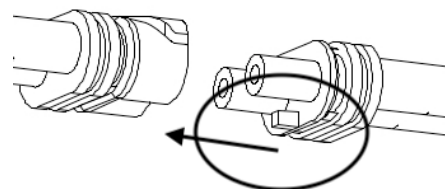
## Set Initial Air/Water Ratio (FIG 5)

1. Set AIR to 7.
2. Set WATER to 2.
3. NOTE: We have found this to be the ratio that works best to create a full effect plume with little or no water collecting on the surrounding area.



## Connect air/water supply (FIG 6)

1. Prime the Water supply hose by allowing water to flow freely thus bleeding the air from the water line.
2. Align the notch on the air/water connector of the supplied adaptor to the notch on the air/water connector of the 6c.
3. Firmly seat the connectors until they click, and lock into place.
4. Air supplied to the unit should be dry and free from air compressor condensation.
5. NOTE: **Do not cross the streams!** Air and water supply must not be reversed, this may cause irreparable damage to the 6c unit.





6. NOTE: The supplied air should be set to 50psi. (50-70psi is acceptable).
7. NOTE: The supplied water should be a nominal sink tap pressure, free from debris, and can be any potable water. Water line should have a fine mesh filter to keep debris out of the 6c.

## Power the lighting fixture

1. Power the lighting fixture per console manufacturer's instructions.
2. NOTE: the 6c should be attached to an outdoor rated LED fixture. Conventional lighting fixtures may heat up and damage the hoses.

## Adjust Air & Water Ratio (FIG 7)

1. Adjust the air and water via the variable valves on the side of the unit to create the desired effect size and type.
2. Take into account any water accumulation on the surrounding areas. The 6c is designed to create a full plume of flame effect while maintaining a dry surrounding area thus creating an effect that is safe to use near other equipment.
3. NOTE: If the Air supply is adjusted too low, the internal piston mechanism of the 6c's nozzle will activate and both air and water output will be stopped. To restore air and water output, increase air supply.
4. NOTE: Increasing the amount of air in relation to the amount of water will result in a narrower, thinner effect, and will result in less or no water collecting on the surrounding area.
5. NOTE: Increasing the amount of water in relation to the amount of air will result in a wider, thicker effect, but could cause water to collect on surrounding area.
6. NOTE: Due to differences in relative humidity the effect may need to be adjusted for more or less water.

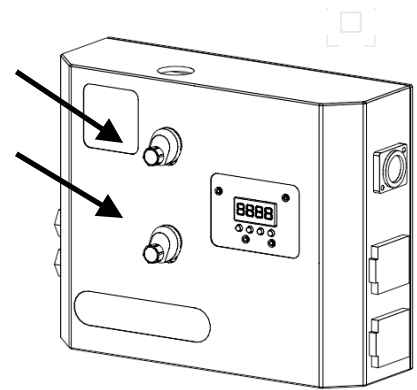


FIG. 7

## Nozzles (FIG 8)

1. Nozzle tips may be changed to create different effects. Use 12mm and 14mm wrenches to remove and replace nozzle tips.
2. It may be necessary to clear a blockage if the nozzle becomes clogged. Use a 14mm wrench to remove the nozzle tip, and inspect for debris.
3. A plume that is wide and not particularly tall is a sign that debris has entered the nozzle and most likely collected on the inside of the tip. Remove the tip to clean out debris.

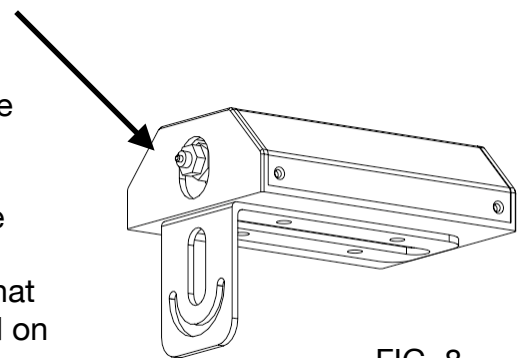


FIG. 8

## **Storing the Unit**

**Be sure to drain remaining water from the unit before storage.**

1. Briefly connect the air supply to the water in on the VF6c unit. This creates a bubble of air to clear the water line.
2. Disconnect the air supply from the unit and reconnect correctly. Run the unit using ONLY the air channel. Leave the water channel at 0. Run the unit until all of the water is cleared from the effect plume.

## 5. A Few More Things

### DMX

The VF6c uses 2 channels of DMX for control. The internal valves are not variable, they are either ON or OFF. It is best to set these channels on the console to “NON-DIM” channels. (See your lighting console manual for information on this.)

Channel 1	AIR ON/OFF
Channel 2	WATER ON/OFF

### Air & Water

The air compressor used to supply the VF6c with air should be in good working order and supply clean dry air. Excessive moisture in the air supply can damage the VF6c unit. If you are in an area with high ambient humidity, an air dryer should be installed on the air compressor supply line.

Any clean potable water can be used in the VF6c. In short, if you can drink it, so can the VF6c! Debris in the water line can clog and damage the VF6c unit. We recommend installing a filter for debris on the water supply line.

The VF6c unit can be connected to a building’s water supply line. This will provide fresh water to the unit. Standard building pressure as is supplied to a sink or faucet is fine.

Unpleasant odors can occur if water is left in the unit for extended periods of time. IMMEDIATELY clean the unit if found odors are present. We recommend a solution of 2 oz of white vinegar to 5 gallons of water run through the unit for 10-20 minutes.

The recommended air pressure for the VF6c unit is between 50-70psi. We find the best effect is when the air supply is set at 60 psi.

The VF6c Unit can be run from a water pump and tank when building water supply is not feasible. The recommended water pressure supplied from the pump is 3.5 GPH.

When setting up the unit, remember to prime the water supply hose by allowing water to flow through the hose and out prior to connecting the water supply hose to the VF6c. Air trapped in the water line could cause the unit not to function.

The air/water hoses are valved and need to be connected to flow. Connecting a VaporFlame Bleeder Hose will allow you bleed air from the water hose or drain remaining water from the hoses.

## Warranty

VaporFlame provides a limited warranty for all fixtures and engines.

Each fixture (VF6c) has a 2-year warranty, including parts and labor.

Warranty on each fixture is only valid if fixture was operated under normal conditions.

To apply for the warranty, the fixture must be shipped, at owners expense, to VaporFlame. VaporFlame will then assess the fixture to evaluate the issue and determine if the issue falls under the warranty.

If VaporFlame determines the fixture is under warranty, then VaporFlame will correct the issue and ship back to owner at VaporFlame's expense. If VaporFlame determines the fixture is not under warranty, VaporFlame will ship the fixture back to the owner at the owners expense.

If VaporFlame determines the fixture is not under warranty, but the owner would like to VaporFlame to correct the issue, the owner will be charged time and materials. VaporFlame will provide an estimate to the owner to correct the issue and the owner must pay prior to VaporFlame correcting the issue. Once the issue on the fixture has been addressed, VaporFlame will ship the fixture back to the owner at the owners expense.

Warranty for light fixtures falls under the light fixture manufacture's warranty and not under VaporFlame.

## Tips and Tricks

VF6c Tips and Tricks	
I want a cool flickery effect	<ol style="list-style-type: none"> <li>1. While the effect is running, bump the water channel (channel 2) on/off from the control console.</li> <li>2. Water remaining in the 6c will run through and the plume will die down.</li> <li>3. Bumping the water channel on the control console will cause the plume “flare up”.</li> </ol>
I want a tall effect.	<ol style="list-style-type: none"> <li>1. Set the air valve on the unit to 7</li> <li>2. Set the water valve on the 6c to 2-3</li> <li>3. Fire the effect</li> </ol>
I want a low flame.	<ol style="list-style-type: none"> <li>1. Set the air valve on the 6c to 5</li> <li>2. Set the water valve on the 6c to 0-1</li> </ol>
Nothing is coming out of the nozzle.	<ol style="list-style-type: none"> <li>1. Check the air supply</li> <li>2. Open the air valve on the 6c. Set above “5”</li> <li>3. Check to see if the air and water hoses are correctly connected to an air and water supply</li> <li>4. Set the air pressure above 40 psi</li> <li>5. Check power</li> <li>6. Check data/control</li> </ol>
Air is coming out of the nozzle, but water isn’t coming out of the nozzle.	<ol style="list-style-type: none"> <li>1. Check water supply</li> <li>2. Open the water valve on the 6c</li> <li>3. Check to see if the air and water hoses are correctly connected to an air and water supply</li> <li>4. Pinch your fingers over the nozzle tip sealing the output of air and then release. This can equalize internal pressure blockages</li> <li>5. Remove nozzle tip with a 12mm and 14mm wrench. Check for debris blockage.</li> <li>6. Check data/control</li> </ol>
I am getting a plume of air/water vapor, but it is minimal, or low and wide.	<ol style="list-style-type: none"> <li>1. Adjust the air to water ratio on the 6c. Too much air in relation to water can cause a wide low plume</li> <li>2. Check air pressure. Air pressure should be 40-70 psi. (45-50 psi is ideal!)</li> <li>3. Remove nozzle tip with a 12mm and 14mm wrench. Check for debris blockage.</li> </ol>
The plume is really wet!	<ol style="list-style-type: none"> <li>1. Adjust the ratio of air to water on the 6c. (Turn down the water valve on the 6c)</li> </ol>
The 6c lags when I try to turn it off from the console. It doesn’t “bump” off quickly.	<ol style="list-style-type: none"> <li>1. Drain the condensation from your air compressor’s tank. Moisture can cause the air valve to stick open.</li> </ol>
I crossed the streams and now the 6c won’t work	<ol style="list-style-type: none"> <li>1. Don’t cross the streams!!</li> <li>2. Sending water into the air hose of the 6c will damage the internal air valve. You can try letting the unit dry out for a few hours.</li> <li>3. The air valve needs to be replaced by the manufacturer.</li> </ol>