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1 BEFORE YOU BEGIN

1.1 What Is Included




- Machine
- Timer Remote Control
- Hanging Bracket

1.2 Unpacking Instructions

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.

If the box or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier or dealer/seller immediately. In addition, keep the box and contents for inspection.

1.3 Symbols

Symbol	Meaning
	Caution Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
	Important Important installation or configuration information. Failure to comply with this information may keep the product from working correctly.
	Information Useful information.

1.4 Disclaimer

The information and specifications contained in this User Manual are subject to change without notice. FROGGYS FOG assumes no responsibility or liability for any errors or omissions and reserves the right to revise or to create this manual at any time.

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1.5 Safety Notes

Please read the following Safety Notes carefully before working with the product. The notes include important safety information about installation, usage, and maintenance.

1.5.1 Personal Safety

- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- During heating up and operation, the housing will be scalding hot. Do not touch.
- **The product is very hot during operation and it remains hot for a long time after operation has stopped. Do not touch the products nozzle.**
- Make sure that children, unauthorised people and animals do not obtain access to the machine.

1.5.2 Mounting and Rigging

- To prevent risk of fire or shock, do not expose the product to rain or moisture.
- CAUTION: When transferring product from extreme temperature environments, (e.g. cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow product to fully acclimate to the surrounding environment before connecting it to power.

- Do not mount the product on a flammable surface (linoleum, carpet, wood, paper, carton, plastic, etc.).
- Do not use in a confined space. Always install the product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- When hanging this product, always secure to a fastening device using a safety cable.
- Be sure that no ventilation slots on the product's housing are blocked or clogged by dust. If necessary, remove the dust.

1.5.3 Power and Wiring

- Always make sure that the voltage of the outlet to which you are connecting the product is within the range stated on the decal or rear panel of the product.
- Make sure the power cord is not crimped or damaged.
- Never connect this product to a dimmer pack or rheostat.
- Never disconnect the product from power cord by pulling or tugging on the cord.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it

1.5.4 Operation

- Do not operate this product if you see damage to the housing or cables. Have the damaged parts replaced by an authorized technician at once.
- Do not use the product as a space heater.
- Make sure there are no flammable materials close to this product while it is operating.
- The maximum ambient temperature is 104 °F (40 °C). Do not operate the product at higher temperatures.
- **Do not cover the ventilation slots when operating to avoid internal overheating.**
- **Do not cover or plug the output nozzle during operation.**
- Wipe up spitted fluid immediately. Moisture – also fluid – can destroy the electric.
- You may hear a loud popping sound during operation. This is normal.
- Never carry the product by the power cord or any moving part. Always use the handles of the machine.
- **Drain the tank before transporting the product.**
- Always disconnect the product from the power source before cleaning.
- In the event of a serious operating problem, stop using the product immediately.
- This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs which can lead to damage or malfunction.



Keep this User Manual for future use. If you sell the product, be sure that the purchaser receives this document.

2 INTRODUCTION

2.1 Description

The Titan 1500DMX is a powerful 1550W Fog Machine with over 25,000CFM. The 1500DMX features both 3 and 5 pin DMX, 4 Button Control Panel with LED SSD and timer functions. The Oversized Heater Core increases run times, Quick Ready Fog Technology (QRFT) has you ready to fog in less than 10 seconds after full cycle and it is ready to fog, and Advanced Low Fluid Sensing shuts down the machine when you run out of fluid to protect the heater core.

2.2 Features

- 1550W
- 25,000 CFM
- Oversized Heater Core for increased run times
- Quick Ready Fog Technology (QRFT) - Less than 10 seconds after full cycle and it is ready to fog
- Advanced Low Fluid Sensing
- Blue Powercon Connection
- 4 Button Control Panel with LED SSD
- 3" Venturi Style Nozzle Connection
- Durable 5 Liter Fluid Tank
- Built-In Hanging Bracket
- Timer Control Included (Wireless Optional)
- Electronics Compartment to keep all fluid related components away from boards
- Removable Fluid Tank Bracket for tight install applications
- Rubberized Feet

3 TECHNICAL SPECIFICATIONS

AC Power	Input Voltage & Rate	120 V, 60 Hz
	Current Limiter Type	Fuse
	Current Limiter Specifications	250V
	Total Power Consumption	1,500 W
Heating	Heat Up Time	4 Mins
Capacity	Fluid Tank Capacity	1.3 Gal
	Output Duration with Fluid Tank Full	50 mins
Output	Adjustable Output	YES
	Max Output Volume	25,000 cfm
	Max Output Height	20 ft
	Fluid Consumption (100% Output)	102 ml/min
	Maximum Continuous Duration (100% Output)	40+ Secs
	Continuous Output	@ 30% maximum output
Placement & Mounting	Horizontal	YES
	Inclined	YES
	Vertical	YES
	Hang Upside Down	N/A
Control	On-device Manual Control	7-Seg Digital Display
	Wireless Control	Optional FFM-RM-WR5 / RF 433MHz / Built-in
	Wired Control	Included
	Control Protocol	DMX512
	DMX Channel Range	1
Certification	CE	N/A
	RoHS	N/A
Consumable	Consumable	Water Based Fog Fluid
Weight & Dimensions	Net Weight	23.5 lbs
	Gross Weight	28.7 lbs
	Machine Dimensions	21.3 x 12 x 11.5 in
	Packing Dimensions	25.5 x 14.4 x 13.6 in

4 SETUP

4.1 AC Power

The machine has a fixed voltage power supply and can work with an input voltage of AC 120 V, 60 Hz, depending on the specific model.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.



Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

4.2 AC Plug

The FFM-TITAN-1500-DMX comes with a power input cord terminated with an IEC connector on one end and an US Plug

Fuse Replacement

- Disconnect the product from power
- Wedge the tip of a flat-head screwdriver into the slot of the fuse holder.
- Pry the safety cap out of the housing
- Remove the blown fuse from the clip on the front of the safety cap and replace with a fuse of the exact same type and rating.
- Re-insert the fuse holder and reconnect power.



Disconnect the product from power before replacing the fuse.

4.3 DMX Linking

You can link the FFM-TITAN-1500-DMX to a DMX controller using a 3- or 5-pin DMX connection. If using other DMX-compatible products with this product, you can control each individually with a single DMX controller. Instructions for connecting and configuring this product for DMX operation are in the User Manual.

4.4 Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes.

4.4.1 Orientation

Always mount this product in a safe position and make sure there is adequate room for ventilation, configuration, and maintenance.

4.4.2 Rigging

FROGGYS FOG recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, make sure there is easy access to the product for maintenance and programming purposes.
- Make sure that the structure or surface onto which you are mounting the product can support the product's weight (see the Technical Specifications).
- When mounting the product on the floor, make sure that the product and cables are away from people and vehicles.

5 OPERATION

5.1 Preparing for Operation

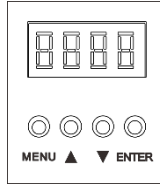
To prepare the FFM-TITAN-1500-DMX for operation, perform the following steps.

- After checking that all the parts are intact and complete, position the machine on flat surface.
- Withdraw the fluid tank from its compartment and remove its cap.
- Verify that the two plastic hoses attached to the cap are in place and in good condition.
- Fill tank with fog fluid and return the tank back to its compartment in the FFM-TITAN-1500-DMX.
- Make sure the plastic hose entering the FFM-TITAN-1500-DMX from the fluid tank cap is not bent or kinked.
- Always connect the product to a grounded circuit. Before power on, make sure it is connected with the rated voltage.

- Turn on the machine, and "HEAT" shows on the display during the heating-up process. After approx. 4 minutes, the display changes to a single lit LED segment when the machine is ready to output.

5.2 On-device Control Panel

To access the control panel functions, use the four buttons located underneath the LCD display.



Button	Function
<MENU>	Switch menu pages to select a function
▲	Increases the numeric value of current function
▼	Decreases the numeric value of current function
<ENTER>	Save current setting and return to standby page.


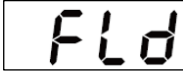
5.3 On-device Control Mode & Operation

5.3.1 Programming

- Refer to the Menu Map to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.
- To go to the desired main level, press <MENU> repeatedly until the option shows on the display. This will take you to the first programming level for that option.
- To select an option or value within the current programming level, press ▲ or ▼ until the option shows on the display. If there is another programming level, you will see that first option, or you will see the selected value.
- Press <MENU> repeatedly to switch menu pages.
- Press <ENTER> to go back to Standby Page at any time.
- The machine can be operated manually, the Manual button is located on the rear of the unit, press it to trigger fog output.

5.3.2 Menu Map

	Display	Description	Parameter Range
Starting Pages		Wireless pairing	
Preparing Pages		The machine is heating up	
Standby Page		Finished heating up, ready to work.	

Setting Pages		Press ▲ or ▼ to select DMX starting address	1-512
		No fluid protection	ON/OFF

5.4 Timer Remote Control Mode & Operation


The wired timer controller allows you to automatically trigger fog output by setting interval and duration times. LED indicator lights display the machine and controller's current state. Rotary knobs set interval time, output, and duration time, while manual and continuous buttons allow overriding control.


- Plug in the fog machine to power.
- Plug in the wired timer controller to the Manual Remote Connector socket on the back of the fog machine.
- Allow the FFM-TITAN-1500-DMX four minutes to heat up before continuing. (See Fluid Tank Indicator Lights.)

The wired timer controller has three modes of operation: timer, continuous, and manual.

5.4.1 Timer Mode

To trigger the machine with the timer function, follow the instructions below:


- Set the desired output level with the OUTPUT knob.
 - Set the INTERVAL and DURATION knobs to the desired positions.
-  The INTERVAL knob sets the amount of time in between bursts of fog.
- The DURATION knob sets the length of time that the fog machine will run during the burst.
- Press the <TIMER ON/OFF> latching button. The LED indicator above the button will light up. The timer will now run as set by the INTERVAL, DURATION, and OUTPUT knobs.
 - Press the <TIMER ON/OFF> button again to turn off the timer.


 **The <MANUAL> button will override the timer.**

5.4.2 Continuous Mode

To trigger the machine to continuously cycle fog, follow the instructions below:

- Set the desired output level with the OUTPUT knob.
- Press the <CONTINUOUS> latching button. The LED indicator above the button will light up. The fog machine outputs fog until the <CONTINUOUS> button is pressed again.
- Press the <CONTINUOUS> button again to stop the fog output.

 **In order for Continuous mode to run uninterrupted, without the machine stopping to reheat, set the OUTPUT knob no higher than 30%. At Output levels above 30%, the fogger will cycle through intermittent bursts of fog during its reheating program.**


 **The duration of Continuous fog output is based on the capacity of the tank. Fluid consumption will be significantly increased during Continuous mode.**

5.4.3 Manual Mode

To trigger the machine manually, do the following:

- Set the desired output level with the OUTPUT knob.

- Press and hold the <MANUAL> button on the wired timer controller. The LED indicator above the button will light up. The fog machine will output fog for as long as you hold down the <MANUAL> button until the heater core falls below the minimum vaporization temperature.
- Release the <MANUAL> button to stop the fog output.

 **The duration of manual fog at any given output setting is based on the capability of the fog machine.**

5.5 Wireless Remote-Control Mode & Operation (Optional)

The FFM-TITAN-1500-DMX allows for the optional wireless remote receiver to plug into the remote port on the fog machine. The fog output can be activated by pressing the "On" button on the remote and deactivated by pressing the "Off" button.


5.6 DMX Mode & Operation DMX


The Machine FFM-TITAN-1500-DMX works with a DMX controller.

- Connect the product to a suitable power outlet.
- Turn the product on.
- Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

5.6.1 Starting Address

When selecting a starting DMX address, always consider the number of DMX channels. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

 **FROGGYS FOG® Titan 1500 DMX set the starting address in the 001 - 512 DMX range and uses 1 DMX channel, which defines the highest configurable address to 512 to have all channels controllable.**

 **Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product, or press repeatedly "MENU" button until the LCD shows "DMX Address" . Press ▲ or ▼ to set desired DMX starting address.**

5.6.2 DMX Mode Menu Map

- When the machine connects to DMX, the display will always show DMX starting address, and you can set or change it at any time.



5.6.3 DMX Channel Assignments and Values DMX

Channel	Function	Value	Description
1	Fog	000 - 010	No function
		011 - 255	1-100%

5.7 Fluid Sensor

This machine uses software-based fluid sensor to detect whether there is fluid inside tube so as to protect the pump from being damaged. Turn on the "FLd" to activate "No Fluid Protection" function.

5.7.1 Trigger "No-Fluid Protection"

When the FLd is ON, the software-based "no-fluid protection" function will be activated. After the program continues to detect the machine working with no fluid inside the tube for 1 minute, the pump-shutoff will be activated with the flickering warning page showing on the screen.

5.7.2 Clear "No-Fluid Protection" Warning

When the machine is under the no-fluid protection, after refilling the fluid, there are three ways to clear the warning.

- Press and hold ENTER until the fluid is pumped and fill the tube.
- Under the DMX control mode, bring down channel 1 to OFF (value 0-9), then up to ON (value 10-255),

- Turn off "FLd" in the menu.

6 TECHNICAL INFORMATION

6.1 Maintenance

Do not allow the FFM-TITAN-1500-DMX to become clogged. Please follow these instructions for safely cleaning your fog machine if output become noticeably decreased. High Quality fluid recommended by the manufacturer lengthens the amount of time between periods of maintenance as described below.

Tools: Clean lint free cloth, coffee filter or similar fine mesh filter cloth, plastic or glass container larger than the reservoir size (do not use metal), distilled water and Froggys Fog fluid.

1. Allow the machine to cool down before handling.
2. Drain any Fog solution that remains in the tank into a container through the filter mesh for reuse.
3. Add distilled water to fill the Fog fluid reservoir approximately 1/3.
4. Run machine for 10 minutes. Fog will come out the first few cycles, followed by distilled water vapor.
5. Turn off the machine and allow to cool down, then drain the distilled water from the reservoir.
6. Refill the reservoir approximately 1/3 with good quality fog solution.
7. Turn the machine on, run for 10-15 minutes. Water vapor steam will come out the first few cycles, followed by fog. Continue cycling the machine for 5-10 fog cycles.
8. Turn off the machine and allow to cool, then wipe machine clean with clean lint free cloth.
9. The excess fog fluid is best stored in a sealable container. The solution in the tubing acts a lubricant and conditioner for the plastic and rubber parts in the fluid pump.
10. Store the machine in a cool, dry place when not in use. Avoid freezing temperatures, high heat above 120 degrees and humid/damp locations which may cause control board failure.
11. If possible, remove from storage after 6 months and operate the machine for 15 minutes or more,



then repeat step 8 – 10. **Test-run your FROGGYS FOG® FFM-TITAN-1500-DMX on a monthly basis to achieve the best performance.**

7 WARRANTY INFORMATION

7.1.1

Save these instructions. 2 Year Limited Warranty: Valid from the date of purchase. Warranty covers manufacturing defects only and does not cover misuse or abuse of the machine. Serial number, place of purchase with dated valid receipt must be submitted at time of service. Warranty is only valid with-in the United States. Buyer may be responsible for shipping fees associated with repairs.