



# ROSCO DELTA 3000™ FOG MACHINE OPERATION MANUAL

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This manual covers the following products:

## ROSCO DELTA 3000™ FOG MACHINE

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## INTRODUCTION

This manual offers a detailed explanation of the operation of the ROSCO DELTA 3000 Fog Machine. To assure efficient and safe operation, please take a few minutes to read this material.

The ROSCO DELTA 3000™ fog machine is a thermal aerosol generator designed for variable fog output. It features the DELTA TECHNOLOGY™ which is a revolutionary electronics design unmatched by any other fog machine. DELTA TECHNOLOGY™ offers accurate thermal control, precise pump speed as well as allowing the Delta 3000 to be operated manually, by timers, from a DMX lighting console, or a 0-10 volt signal.

The Delta 3000 is part of a system, the other basic component being the full line of Rosco fog fluids. They should always be used together. These unique fluid formulations are safe when used according to instructions. They are water-based and contain no petroleum distillate. The operating temperature, pump pressure, and output nozzle orifice of the machine have been specifically set to maximize aerosolization of the Rosco fog fluids. When used properly, the system should operate for many years.

## HOW THE MACHINE WORKS

When the heat exchanger has reached proper operating temperature, the operator switches power to the siphoning pump, which draws the fog fluid from an external reservoir into the heat exchanger. The fluid is rapidly heated and vaporized. The vaporized fluid is then discharged through the nozzle into the atmosphere where, upon mixing with the cooler air, it turns into an aerosol consisting of millions of fine particles.

**NOTE:** The terms “fog” and “smoke” are used interchangeably. However the ROSCO DELTA 3000 does not produce smoke, but a mist or aerosol.



## IMPORTANT SAFEGUARDS

READ AND UNDERSTAND THESE SAFETY PRECAUTIONS BEFORE OPERATING THE MACHINE. FAILURE TO PROPERLY FOLLOW THESE PRECAUTIONS MAY LEAD TO A FIRE, EXPLOSION, OR ELECTRICAL SHOCK.

**FOG FLUID HEALTH CAUTION: VAPOR FROM THIS FLUID, LIKE ANY OTHER COMMON MATERIAL IN A VAPORIZED STATE, MAY BE IRRITATING TO OR CAUSE ALLERGIC SYMPTOMS IN SOME PERSONS WITH ALLERGENIC SENSITIVITY. DO NOT EXPOSE AT CLOSE RANGE TO KNOWN ASTHMATICS.**

1. This machine uses electrical power at common commercially available voltages. When directly contacted, such voltages are hazardous to human life. All precautions commonly applicable to the use of electric power generally are applicable to the use of this machine. This machine is designed to operate from three-wire power systems where one of the wires is a safety ground. DO NOT disconnect the safety ground or use extension cords or "cheater" plugs to connect this machine to a two-wire system. Operation without a safety ground may result in a hazardous electrical shock.

2. Check the current and voltage rating of your machine. Extension cords must be properly sized and rated for voltage, current and length. Check your local electrical code for the correct gauge extension cord. If an extension cord shows signs of wear or gets warm to the touch, discontinue its use and obtain a cord with a higher current rating. Improper extension cords are not only hazardous, but may result in poor machine performance due to excessive voltage drop.

3. Never use any machine that shows signs of improper use. Even slight damage may be an indication of a major problem. If the machine looks questionable, use it only under strict observation. If the machine shows any unusual behavior, disconnect machine immediately from power and send machine to a Service Center for repair.

4. Do not operate the machine in a tightly confined space where the ambient temperature might exceed 135° F (57° C). A continuous flow of air is required to maintain temperature within the machine housing. Sensitive electronic components deteriorate rapidly under high heat conditions. Operation of the machine in an enclosure of less than ten cubic feet (one cubic meter) is dangerous, and automatically voids the warranty.

**Enclosing any heating device so it is invisible to the operator creates a potential fire hazard, no matter what the ambient temperature of the enclosure. To do so with any high-amperage device is to assume substantial risk. Rosco strongly recommends against it.**

5. In any facility, the fog concentration should be controlled. The fog should never mask emergency exits, safety signs, staircases or other safety constructions.



6. After long use, or if the machine is not properly set, some liquid droplets or wet area may appear in front of the machine's outlet. This liquid should be wiped up to prevent a condition where someone might slip and fall.

7. Machines are designed for continuous use over an 8-hour day, but to protect components, it is wise to turn off the machine when it is not in use. In permanent installations, it is advisable to equip the circuit with a night cut-off device.

8. During the warm-up phase and during operations, people should not stand within three feet (one meter) of the front of the machine. Flammable material like paper, fabric, etc., should never be placed directly on or around this equipment, or any other electrical device with a heating element.

9. The fog should be blown into an open space and should not be directed at people or objects. Never blow fog on hot surfaces, into glowing heating elements or into open flames. The normally non-flammable and non-toxic haze could react on very hot surfaces and be burnt or decomposed.

10. Unauthorized repair or alteration of any safety devices can lead to improper operation and accidents. Repairs should be performed only by an authorized Service Center.

**WARNING: USE OF ANY FLUID OTHER THAN ROSCO FOG FLUIDS OR MODIFICATION OR ATTEMPTED UNAUTHORIZED REPAIR OF THE ROSCO DELTA 3000 WILL IMMEDIATELY INVALIDATE THE WARRANTY.**



## GENERAL OPERATING INSTRUCTIONS

### OVERVIEW

The Delta 3000 fog machine is a unique fog system that consists of a base unit that can operate from any of three remote controls. Because of the variation in operability between the different remotes, there is an operations section for each remote. First follow the General Operating Instructions and then go to the section for the remote that is being used. If there is doubt about which remote is being used, please reference the picture in each section.

**Note:** The ROSCO DELTA 3000 base unit will ONLY operate with one of the remote controls attached.

### 1. POWER HOOK-UP

Plug the power cord on the base unit into a socket rated at the proper voltage and amperage. The machine requires a dedicated power circuit.

**Note:** If the Delta 3000 was received without a connector on the power cord, please wire an appropriate connector for the voltage and amperage rating of the machine. The connector should be wired according to the following wire code: Brown=Hot (Live); Blue=Neutral; Green/Yellow=Ground (Earth).

### 2. REMOTE CONTROL

If it is not already plugged in, plug the remote control into the socket in the cavity at the rear of the base unit. The green LED over the **POWER** button should blink indicating that the Delta is receiving power. The Delta 3000 can ONLY operate with a remote control attached.

**Note:** The remote attaches with standard computer Category 5 cable using an RJ-45 connection. Although this connection is the same as an ethernet connection, the Delta 3000 is NOT an ethernet-ready device. Do not try to operate the Delta from an ethernet control.

### 3. WARMUP

Push the button marked **POWER** on the remote. This will enable the electronics and the unit will start to heat. Let the machine warm up for about eight minutes until the remote indicates **“READY”**. The Delta 3000 is now ready to make fog as long as the remote indicates that the machine is **“READY”** and there is fluid in the reservoir.

### 4. FLUID DELIVERY

Place either a 2.5-liter or 4-liter size bottle of any Rosco fluid in the cavity located at the rear of the machine. Place the end of the tube coming out of the top of the machine into the bottle. A cap is provided that fits on the bottle. The cap will also fit a standard 1-liter Rosco bottle.

**Low Fluid Sensor:** The Delta 3000 is equipped with a Low Fluid Sensor. When fluid reaches a certain point in the bottle the remote will indicate that the fluid is running low. This is simply an indication to the operator that the fluid level should be checked and will not affect the performance.



**Pump Cut Off:** The Delta 3000 is also equipped with a thermal cut-off that is attached to the pump. If the machine is running when the fluid bottle is empty, the pump could start to overheat at which time the thermal sensor will cut off power to the pump. Avoid running the machine without fog fluid to prevent damage to the pump.

**CAUTION: The machine only works with uncontaminated Rosco fog fluids. Other manufacturers' fluids may cause spitting and serious clogging problems and could result in the production of an unhealthy aerosol. The use of other fluids voids the warranty of the Rosco Delta 3000 Fog Machine.**

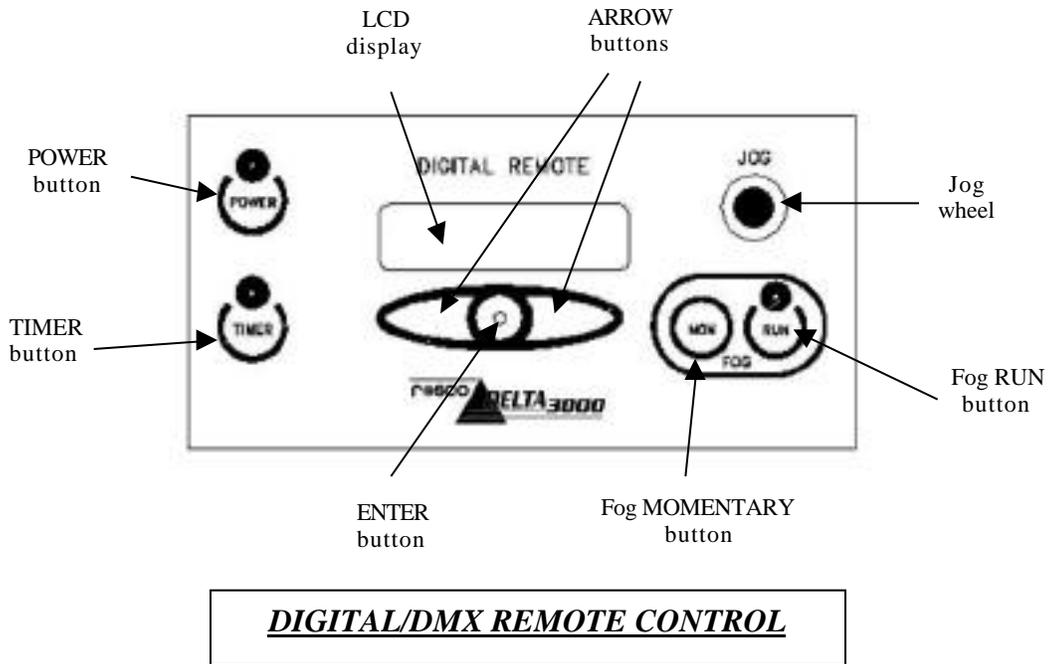
### **5. 0-10 VOLT INPUT**

In addition to operating directly from the remote controls and a DMX console, the Rosco Delta 3000 is also equipped to operate from a 0-10 volt input. The input is located on the rear of the machine near the DMX connectors. The 0-10 volt input is wired through an RJ-11 connector. Pin 1 is positive and pin 4 is negative. The 0-10 volt input will ONLY operate the Delta with a remote attached and power turned on at the remote.

### **6. AIR INPUT**

The Delta 3000 is equipped with Air Input located at the rear of the machine. This is to allow the use of compressed air to clean the heat exchanger. In addition, compressed air can be used for effects.

## DIGITAL/DMX REMOTE CONTROL OPERATING INSTRUCTIONS



**DIGITAL/DMX REMOTE CONTROL**

### OVERVIEW

The DIGITAL/DMX REMOTE CONTROL is a sophisticated digital interface that allows the the Delta 3000 to be operated: manually (MANUAL MODE); from timers (TIMER MODE); from DMX control (DMX MODE); or from a 0-10 volt signal. The interface is a backlit liquid crystal display (LCD) showing a series of commands. The interface allows the menu to display in any of six languages (English, French, Spanish, Italian, Portuguese, and German). In addition, it allows timers to be set in one second increments up to 10 minutes on and one hour off and has an easy interface to set the DMX channel. It also gives error messages that indicate when the reservoir is running low on fluid or when there is no DMX signal. To view the menu structure, see the MENU FLOWCHART on page 18.

### 7. INITIAL OPERATION

Follow steps 1-4 above. When first powered the DIGITAL/DMX REMOTE will display a scrolling “**ROSCO DELTA 3000 FOG MACHINE**” message and then display the Operation Menu. The Operation Menu is the primary interface for operating the Delta 3000. While in the Operation Menu, the LCD will give a “**HEATING**” message. **Note:** The DIGITAL/DMX REMOTE will indicate when the fluid container is low on fluid with an alternating message “**LOW FLUID LEVEL**” in the Operation Menu.

### 8. LANGUAGE DISPLAY



The DIGITAL/DMX REMOTE CONTROL is unique in that it can display the menu commands in any of six languages: English, French, Spanish, Portuguese, Italian, and German. To access the Language Menu: While in the Operation Menu, push the **ENTER** button once. The Language Menu will display. Push an **ARROW** button to scroll through the language choices. When the desired language is displayed, push the **ENTER** button.

## 9. MANUAL MODE

To produce fog manually: With the Operation Menu displayed, push the **RUN** button or the momentary (**MOM**) button located on the remote control. Push the **RUN** button again to stop producing fog. (The momentary button will stop producing fog as soon as it is released.) The volume of fog can be varied by turning the **JOG WHEEL** until the desired level is reached. The output level is listed in 5% increments on the LCD display.

## 10. TIMER MODE

The DIGITAL/DMX REMOTE CONTROL is equipped with timers. To enable the timers: With the Operation Menu displaying, push the **ENTER** button until the LCD reads “**SET TIMERS**”. Push an **ARROW** button until “**YES**” is blinking. Push the **ENTER** key. The LCD will next display the **ON TIME** settings. This refers to the amount of time that the machine will make fog. The “minutes” display will be blinking. Turn the **JOG WHEEL** until the desired amount of time is displayed (up to 9 minutes). Next push an **ARROW** button and the “seconds” display will be blinking. Turn the **JOG WHEEL** until the desired amount of seconds (up to 59) is displayed. If you want to change the minutes push an **ARROW** button again.

Once the desired **ON TIME** is displayed, push the **ENTER** button for the **OFF TIME** setting. This refers to the amount of time between bursts of fog. The “minutes” display will be blinking. Turn the **JOG WHEEL** until the desired amount of time is displayed (up to 59 minutes). Next push an **ARROW** button and the “seconds” display will be blinking. Turn the **JOG WHEEL** until the desired amount of seconds (up to 59) is displayed. If you want to change the minutes push an **ARROW** button again.

Once the **OFF TIME** is set, push the **ENTER** button and the LCD will display “**SET DMX?**”. Answer “**YES**” if you wish to set a DMX channel (see below **DMX MODE**) or “**NO**” if you do not. Push the **ENTER** button. The display will read “**SAVE SETTINGS?**”. If you want to keep the timer settings push an **ARROW** button until “**YES**” is blinking then push the **ENTER** button. If you do not want to keep the timer settings, push an **ARROW** button until “**NO**” is blinking and then push the **ENTER** button. The LCD will return to the “**SET TIMERS**” display. New times can now be entered. Once the settings are saved and the Operation Menu is displayed, the timer function can be turned on by pushing the **TIMER** button on the remote. The yellow LED over the **TIMER** button will light indicating that the Delta is in timer mode. When timers are no longer required, simply push the **TIMER** button again. To adjust the volume in the **TIMER MODE**, turn the **JOG WHEEL** to the desired fog volume.



**Note:** When “YES” is chosen in the “SAVE SETTINGS” submenu, the memory in the DIGITAL/DMX REMOTE CONTROL will remember the settings even when the machine is turned off or disconnected from a power source.

## 11. DMX MODE

The Rosco Delta 3000 has the option to be operated from a lighting control console using USITT DMX 512/1990.

**Attaching DMX cable:** Plug a standard 5-pin DMX cable to the connection marked **DMX IN** at the rear of the base unit. Note that the DMX signal can pass through to another device by plugging another cable into the **DMX OUT** plug. **Note:** Like any DMX controlled device, if the Delta 3000 is the last device in the DMX line then a terminator plug must be plugged into the **DMX OUT** connection.

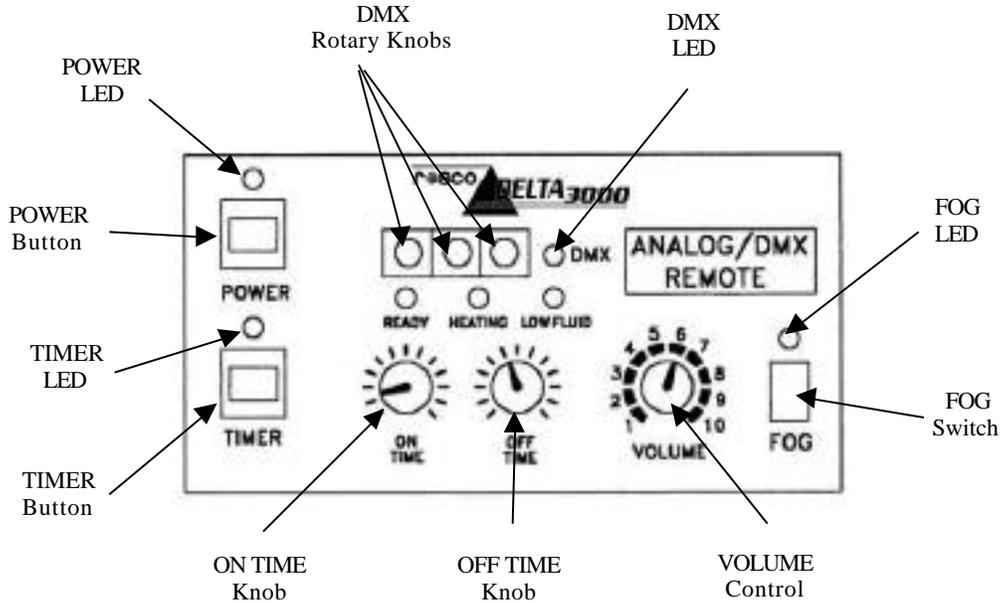
**Setting the DMX address:** With the Operation Menu displayed, push the **ENTER** button until the “SET DMX” menu is displayed on the LCD. Push an **ARROW** button so that “YES” is blinking. Turn the **JOG WHEEL** until the desired DMX address is displayed. Turn the **JOG WHEEL** clockwise to display higher numbers and counterclockwise for lower numbers. **Note:** After 512, the channels will go back to 1 so when going from a low number to a high number, the **JOG WHEEL** can be turned counterclockwise.

**Saving the DMX address:** When the desired channel is displayed push the **ENTER** button and the LCD will display “SAVE SETTINGS”. To keep the DMX channel settings push an **ARROW** button until “YES” is blinking then push the **ENTER** button. If the DMX channel settings are not to be kept, push an **ARROW** button until **NO** is blinking. Once the DMX address is saved, the Delta 3000 will automatically be set to run from DMX.

**Operating the unit:** With the Operation Menu displayed and the Delta 3000 in DMX mode (see above), turn the machine on at the remote by pushing the **POWER** button. Once the remote reads “READY” and the Delta is in DMX mode, the unit will receive signals from the lighting console. When the selected channel has a non-zero value at the light board, the Delta will make fog. The percentage reading at the light board corresponds to the output. (i.e., if the channel at the light board is set at “75%”, the Delta will run at a volume of 75%.) To stop fogging, set the channel to zero. The selected channel can be written into any cue.

**IMPORTANT NOTE:** While in DMX Mode the Delta 3000 can also be operated manually or, if timers have been set, in the Timer Mode. The Timer Mode will supersede the DMX Mode and the Manual Mode will supersede the Timer Mode. When “YES” is answered to the “SAVE SETTINGS?” message, the Digital DMX Remote will only remember the last settings and will erase any previous settings. To set timers and DMX, both settings must be entered and then the settings should be saved.

## ANALOG/DMX REMOTE CONTROL OPERATING INSTRUCTIONS



**ANALOG/DMX REMOTE CONTROL**

### OVERVIEW

The ANALOG/DMX REMOTE CONTROL is an analog interface that consists of an array of switches and knobs. These allow the Delta 3000 base unit to be operated: manually; from timers; from DMX control; or from a 0-10 volt signal. The timers will allow production of fog for up to 2 minutes with intervals of up to 4 minutes between bursts. It also has a series of rotary switches to set the DMX channel. In addition, the ANALOG/DMX REMOTE CONTROL has LEDs that indicate when the reservoir is running low on fluid or when there is a DMX signal.

### 12. INITIAL OPERATION

Follow steps 1-4 above. When first powered the red LED marked **“HEATING”** will light indicating that the Delta is heating up. Let the machine warm up until the green **“READY”** light is lit. **Note:** The ANALOG/DMX REMOTE CONTROL will indicate that the fluid container is low on fluid with a red LED marked **“LOW FLUID”**.

### 13. LOCAL OPERATION

To produce fog directly from the remote, push the **FOG** switch located on the right side of the remote control. If the upper part of the switch is depressed, the Delta will produce fog until the switch is returned to the center position. To create fog momentarily, depress the lower part of the switch. When the switch is released it will automatically return to the center



position. The volume of the fog can be varied by turning the **FOG VOLUME** knob until the desired level is reached.

#### 14. TIMERS

The ANALOG/DMX REMOTE CONTROL is equipped with timers to automatically sequence the fog. To set the amount of time that the machine will make fog, turn the knob marked **ON TIME**. The longest time that the ANALOG/DMX REMOTE will make fog is 2 minutes. By experimenting with the knob, the desired time can be determined. To set the amount of time between bursts, turn the knob marked **OFF TIME**. The longest time between bursts is 4 minutes. By experimenting with the knob, the desired time can be determined.

To turn the timers on, push the **TIMER** button located on the left side of the ANALOG REMOTE. A yellow LED above the switch will light indicating that the timers are activated. The on/off cycle will start with a burst of fog. The volume of the fog can be varied by turning the **FOG VOLUME** knob until the desired level is reached. To turn the timers off, push the **TIMER** switch and the yellow LED will turn off.

**Note:** For more accurate timer control or longer sequences, use the DIGITAL/DMX REMOTE instead of the ANALOG/DMX REMOTE CONTROL.

#### 15. DMX

The Rosco Delta 3000 has the option to be operated from a lighting control console using USITT DMX 512/1990.

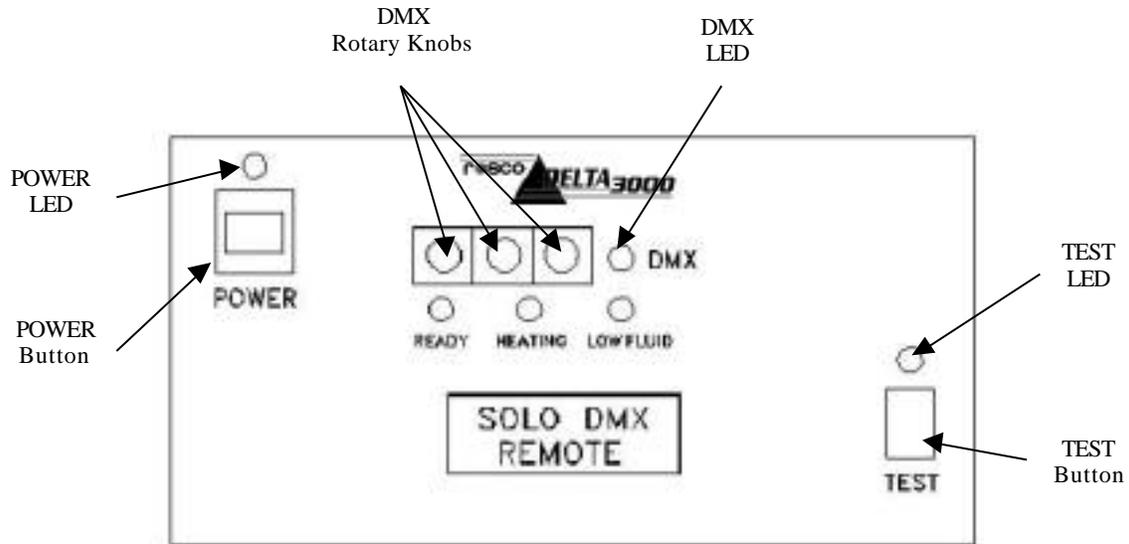
**Attaching DMX cable:** Plug a standard 5-pin DMX cable to the connection marked **DMX IN** at the rear of the base unit. Note that the DMX signal can pass through to another device by plugging another cable into the **DMX OUT** plug. **Note:** Like any DMX controlled device, if the Delta 3000 is the last device in the DMX line then a terminator plug must be plugged into the **DMX OUT** connection.

**Setting the DMX address:** Using a small straight blade screwdriver, carefully turn the three rotary switches to the desired channel up to 512. Each switch represents a digit. **Note:** If a number higher than 512 is chosen the Delta 3000 will not recognize the channel.

**Operating the unit:** Follow steps 1-4 above. When the selected DMX channel has a non-zero value at the light board, the Delta will make fog. The percentage reading at the light board corresponds to the output. (i.e., if the channel at the light board is set at “75%”, the Delta will run at a volume of 75%.) To stop fogging, set the channel to zero. The selected channel can be written into any cue. When the Delta 3000 is properly attached to a lighting console generating a DMX signal, the amber LED marked “**DMX**” next to the rotary switches will light. If the amber LED is not lit, then there is no DMX signal reaching the Delta.

**Note:** While attached to a DMX signal, the Delta 3000 can also be operated manually or with timers. Turning on the **TIMER** switch will supersede the DMX signal and the **FOG** switch will supersede the **TIMER** switch.

## SOLO DMX REMOTE CONTROL OPERATING INSTRUCTIONS



### SOLO DMX REMOTE CONTROL

#### OVERVIEW

The SOLO DMX REMOTE CONTROL is an analog interface that allows the Delta 3000 base unit to ONLY be operated from DMX control or from a 0-10 volt signal. It has a series of rotary switches to set the DMX channel. The SOLO DMX REMOTE CONTROL has LEDs that indicate when the reservoir is running low on fluid and when there is a DMX signal.

#### 16. INITIAL OPERATION

Follow steps 1-4 above. When first powered the red LED marked “HEATING” will light indicating that the Delta is heating up. Let the machine warm up until the green “READY” light is lit. **Note:** The SOLO DMX REMOTE CONTROL will indicate that the fluid container is low on fluid with a red LED marked “LOW FLUID”.

#### 17. TEST BUTTON

Once the Delta 3000 is heated the unit can be tested to see that it is operating properly. The **TEST** switch is located on the right side of the remote control. If the upper part of the switch is depressed, the Delta will produce fog until the switch is returned to the center position. If the lower part of the switch is depressed, the Delta will produce fog until the switch is released and it will automatically return to the center position.

#### 18. DMX



The Rosco Delta 3000 using the SOLO DMX REMOTE CONTROL should be operated from a lighting control console that uses USITT DMX 512/1990.

**Attaching DMX cable:** Plug a standard 5-pin DMX cable in the connection marked **DMX IN** at the rear of the base unit. Note that the DMX can pass through to another device by plugging another cable into the **DMX OUT** plug. Like any DMX controlled device, if the Delta 3000 is the last device in the DMX line then a terminator plug must be plugged into the **DMX OUT** connection.

**Setting the DMX address:** Using a small screwdriver, carefully turn the three rotary switches to the desired channel up to 512. Each switch represents a digit. **Note:** If a number higher than 512 is chosen, the Delta 3000 will not recognize the channel.

**Operating the unit:** Follow steps 1-4 above. When the selected DMX channel has a non-zero value at the light board, the Delta will make fog. The percentage reading at the light board corresponds to the output. (i.e., if the channel at the light board is set at “75%”, the Delta will run at a volume of 75%.) To stop fogging, set the channel to zero. The selected channel can be written into any cue. When the Delta 3000 is properly attached to a lighting console putting out DMX, the amber LED marked “**DMX**” next to the rotary switches will light. If the amber LED is not lit, then there is no DMX signal reaching the Delta.

**Note:** Even when receiving a DMX signal, the **TEST** switch will override the DMX signal.



## DO'S & DON'TS

- DO Read the entire manual before operating the machine and pay particular attention to all CAUTIONS AND WARNINGS.
- DO Use ONLY Rosco brand fog fluids.
- DO Use an extension cord which is properly rated for voltage, current and length and which is free from nicks or other signs of wear.
- DO Before each operating period, check to see that the machine is clean and free of foreign objects.
- DO Test first for dry fog. Turn the FOG switch on. Place a piece of cardboard or paper 18 inches (50 cm) in front of the machine. If the surface is at all wet return the machine to your dealer for servicing.
- DO Ensure that the machine is adequately ventilated.
- DO Use proper caution when handling hot surfaces
- DO Use the **minimum** amount of fog required to achieve the desired effect.
- DO NOT Use the machine near a person who has asthma or similar inhalation disorder.
- DO NOT Use any foreign substances in the machine.
- DO NOT Use a machine that is damaged or operating improperly in any way.
- DO NOT Use a machine that leaks fluid from the housing.
- DO NOT Leave the machine switched on for prolonged periods without producing fog.
- DO NOT Enclose the machine.
- DO NOT Install the machine in such a fashion that the operator cannot see the whole machine including indicator lights.
- DO NOT Touch the shielded nozzle of the machine. Allow sufficient cooling time after operation before attempting to perform maintenance.
- DO NOT Direct the fog continuously against the same spot. This may eventually cause fluid to recondense on walls, furniture, sets, etc.

**READ THE COMPLETE MANUAL TO INSURE SAFE OPERATION.**



## MAINTENANCE

1. The main fuse of the ROSCO DELTA 3000 Fog Machine is located on the circuit card inside the machine. **NOTE:** Be sure to check the specifications when replacing any fuses.

**WARNING: DISCONNECT THE ROSCO DELTA 3000 FROM POWER BEFORE CHECKING OR REPLACING THE FUSE. FAILURE TO DO SO COULD BE HAZARDOUS AND RESULT IN AN ELECTRICAL SHOCK.**

2. After every operation, the siphon hose should be removed from the external reservoir. The machine should be turned on and fog produced. When there is no more fog coming out of the machine, the machine should be **immediately** turned off.

3. After every operation, **only after the machine has cooled**, it should be wiped with a clean damp cloth or paper towel. This practice prevents the build up of dirt and dust which may enter the machine and damage sensitive internal components. Do not use solvents for cleaning. Soap and water are effective.

4. Before and after the machine is stored for an extended period, the machine should be properly cleaned. The best method for cleaning is using distilled or de-ionized water. To flush the machine, turn it on and, when ready to use, put the fluid pick-up tube into a container of distilled or de-ionized water. Run the water through the machine and flush for three minutes. The tube should be removed from the water and the machine run until nothing comes out of the nozzle. The machine should be **immediately** turned off.

5. During use, operation of all switches and indicator lights should be monitored. Lights that blink or flicker when they should be on or off, for example, are an indication of problems in the machine's circuitry.

## FOG DISTRIBUTION

The fog distribution in an enclosed area depends on air flow and temperature. Natural air movement, air conditioning and other ventilation systems will affect movement of fog. Test under realistic conditions before using. If a space must be filled very quickly, move the machine up and down and side to side. To conduct fog to particular areas, use a hose adaptor and ducting hose (see OPTIONAL ACCESSORIES). Make sure that there is an air space of 3-4 in. (5-7.5 cm) between the nozzle and any ducting hose. Do not use ducting hose smaller than 4 in. (10 cm) diameter. The ROSCO DELTA 3000 works properly only in a horizontal position. Do not tilt the machine during operation.



## ROSCO OFFICES WORLDWIDE

If the machine fails and repairs are required, call or write the nearest Rosco office (listed below) or your local Rosco dealer.

### UNITED STATES

#### World Headquarters

Rosco Laboratories, Inc.  
52 Harbor View Avenue  
Stamford, CT 06902  
(203) 708-8900  
(800) 767-2669  
E-mail: [info@rosco.com](mailto:info@rosco.com)

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E-mail: [info-spain@rosco-iberica.com](mailto:info-spain@rosco-iberica.com)

### AUSTRALIA

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(02)9906-6262  
E-mail: [roscoaus@rosco.com.au](mailto:roscoaus@rosco.com.au)

### BRAZIL

Rosco do Brasil Ltda.  
Rua Costa, 75  
CEP 01304-010  
Sao Paulo - SP, Brasil  
(011) 259-2111  
E-mail: [info-brazil@rosco.com](mailto:info-brazil@rosco.com)



## LIMITED WARRANTY

ROSCO LABORATORIES warrants to the original purchaser that the ROSCO DELTA 3000 FOG MACHINE base unit and any associated remote controls will be free from original defects in workmanship and material for a period of two (2) years from the date of purchase. During the warranty period, machines will be repaired or replaced at the option of Rosco.

If the purchaser returns a completed registration card to Rosco within 30 days of purchase, Rosco will provide free software upgrades to the original owner for the life of the machine. For more information on software upgrades, please contact the nearest Rosco office.

The warranty does not extend to any parts of the ROSCO DELTA 3000 or the remote controls that have been subject to misuse or accident. Neither does the warranty cover any machine that has been opened, modified or repaired other than by Rosco or its designated repair station.

The warranty will not apply if procedures described in the Instruction Manual are not followed. It is the user's obligation to clean and maintain the ROSCO DELTA 3000 according to these instructions, and to follow acceptable practices for handling electrical devices.

**NOTE: USE OF ANY FLUID OTHER THAN A ROSCO BRAND FLUID WILL VOID WARRANTY.**

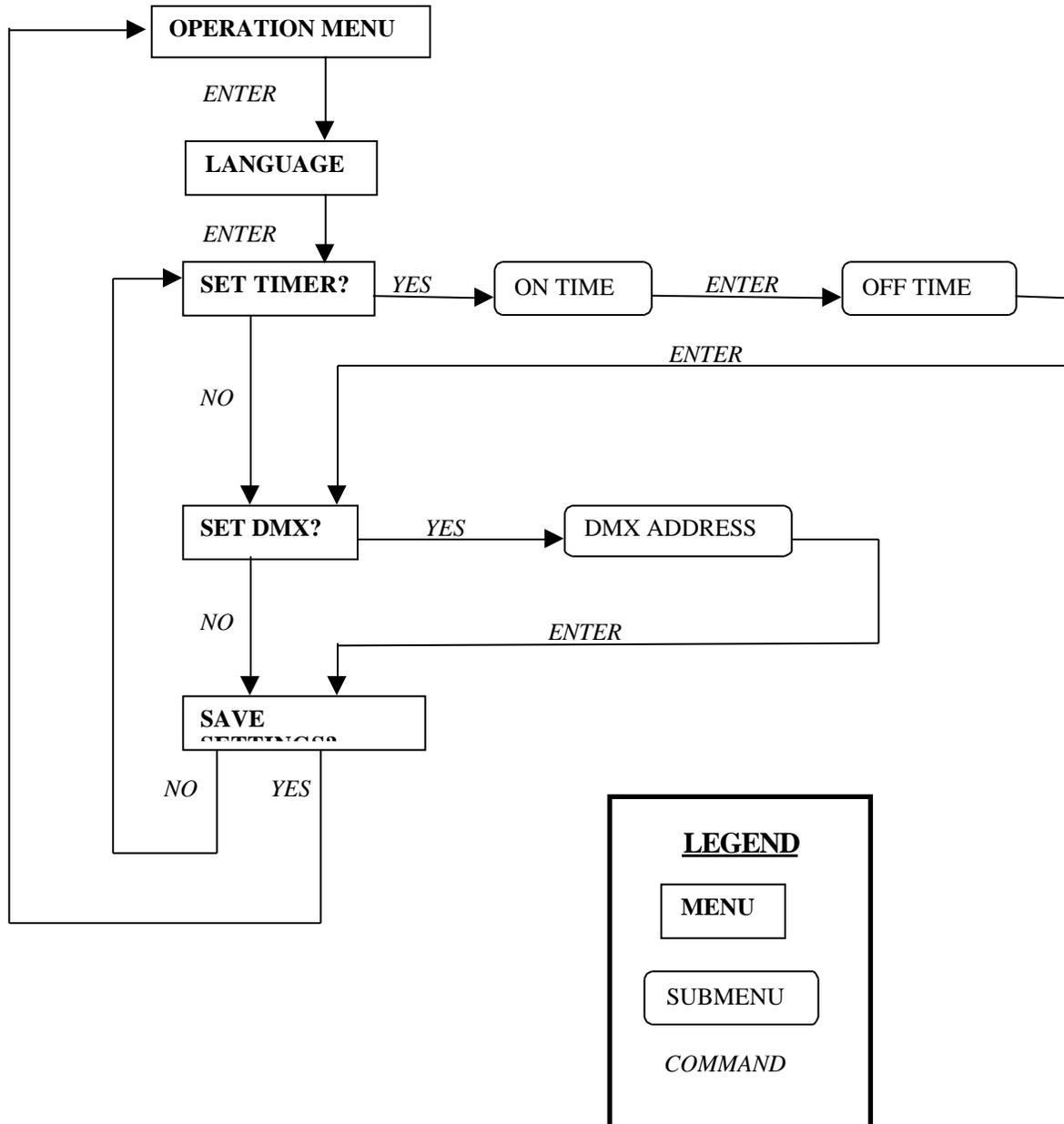
## STORAGE AND SHIPMENT

If you do not anticipate using your machine for an extended period, prepare your machine for storage as follows:

1. Perform maintenance as outlined in "Maintenance" section.
2. Wipe the outside of the machine clean.
3. Store in a sealed cardboard box.
4. Whenever the unit is shipped, considerable care should be taken in packing to avoid damage in transit.

## DIGITAL/DMX REMOTE CONTROL MENU FLOWCHART

**NOTE:** To navigate within a given menu or submenu window (i.e., choosing a language in the Language Menu) use the ARROW buttons.





## ROSCO DELTA 3000 TECHNICAL SPECIFICATIONS

### POWER REQUIREMENTS

120 volts, 60 Hz, 14 amps  
230 volts, 50 Hz, 7 amps

### PARTICLE SIZE

0.25-60 microns

### DIMENSIONS

Height: 7 in. (17.8 cm)  
Width: 13 in. (33 cm)  
Length: 16.5 in. (42 cm)

### WEIGHT

18.5 lb. (8.4 kg)

### MAX. FLUID CONSUMPTION

100 ml/minute

### MAIN FUSE

120 volt: 16A/250v  
240 volt: 8A/250v

### SECONDARY FUSE

.25A/250v

### REMOTE CONTROLS

#### DIGITAL/DMX REMOTE:

Multi-lingual  
Volume Control  
Timers  
On time: 0:01-9:59 min.  
Off time: 0:01-59:59 min.  
DMX address

#### ANALOG/DMX REMOTE:

Volume Control  
Timers  
On time: up to 2:00 min.  
Off time: up to 4:00 min.  
DMX address

#### SOLO DMX REMOTE:

Test button  
DMX address

## OPTIONAL ACCESSORIES

### HOSE ADAPTOR (200616900004)

Metal frame that connects ducting hose to machine  
Dimensions: 4 in. (10.2 cm) x 6.75 in. (17.14 cm)

### DUCTING HOSE (200616950004)

Flexible, plastic hose, connects to hose adaptor for ducting of fog  
Dimensions: 4 in. (10.2 cm) x 25 ft. (7.62 m)