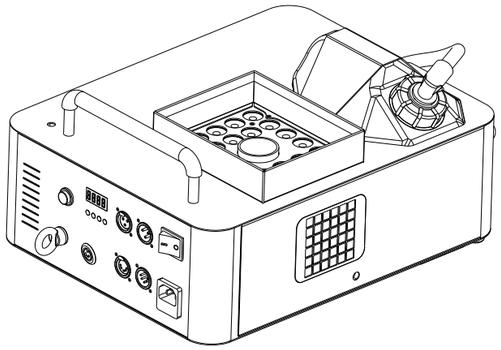
THRILL Vertical Fogger



User Guide

Martin by HARMAN

WARNING!

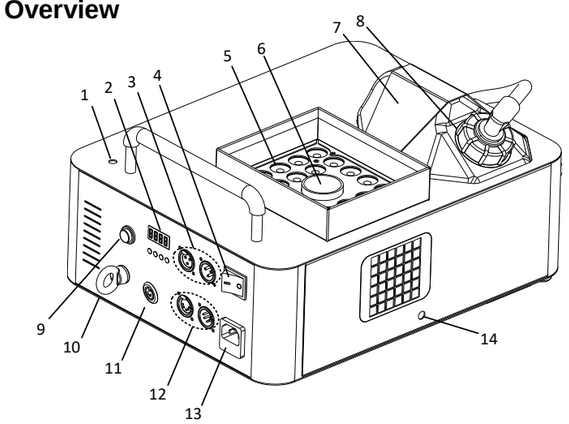
Read the safety precautions in the Safety and Installation Guide before installing or using this product.

Introduction

Congratulations on your purchase of this Martin atmospheric effect machine. The THRILL Vertical Fogger combines brilliant color-mixing LEDs with powerful fog output to produce stunning atmospheric effects. Its flexible rigging and control options make it well suited for a wide range of applications.

This guide describes how to operate and maintain the product. Read the Safety and Installation Guide before using the product.

Overview



1 Eye-bolt attachment point
2 User Interface
3 3-pin XLR DMX sockets
4 Power switch
5 LEDs
6 Fog output nozzle
7 Fluid tank bracket
8 Fluid tank filler cap
9 Pushbutton
10 Safety cable attachment point
11 Remote control socket
12 5-pin XLR DMX sockets
13 AC power input / fuse holder
14 Bracket attachment point

Filling the fluid tank

Warning! Use only fog fluids specifically approved for this machine.

Important! Monitor the fluid level frequently. Do not run the machine without fluid, or you may damage the machine.

Fill the fluid tank only with approved fog fluid. Other fluids may damage the machine or cause the release of toxic gases, presenting a severe health hazard.

Always keep the fluid below the level of the filler cap. See the Safety and Installation Guide to flip the fluid tank for upside-down operation from a truss.

To fill the fluid tank:

1. Check that the effect machine is turned off.
2. Remove the filler cap.
3. Use a funnel to fill the fluid tank with approved fog fluid. Do not overfill.
4. Replace the filler cap, making sure that the feed hose touches the bottom of the fluid tank.
5. Wipe up any spills or drips before turning on the machine.

User settings

Using the control menu

To access the control menu, press the MENU button. Scroll through the menu options using the ▼ (down) and ▲ (up) buttons. Press ENTER to select an option. To return to a higher level in the menu without making a change, press MENU. To exit the control menu, press and hold MENU.

Control menu

Menu	Sub-menu		Explanation
Addr	1-506		Set DMX address
COLO	CH 1-CH 4		Remote control button 1-4
		0	No light
		1-36	Premixed color 1-36
		rAnd	Random color
diSP	inut	On/OFF	Inverted/normal display
MAnU	Str0	0-255	Set strobe value
	dIM	0-255	Set dimmer value
	rEd	0-255	Set red LED value
	grEE	0-255	Set green LED value
	bLUE	0-255	Set blue LED value
	COMA	0-255	Set premixed color value
PbUt	on/oFF		Enable/disable pushbutton
tESt	on/oFF		Run test of all effects
uEr			Readout firmware version
rSt	on/oFF		Reset all settings to default values

DMX address

A DMX controller uses 7 DMX channels to control the THRILL Vertical Fogger. The DMX address is the first channel used. If the Vertical Fogger's DMX address is set to 25, then the controller sends DMX commands on channels 25 - 31. DMX channel 25 on the controller corresponds to DMX channel 1 on the THRILL Vertical Fogger.

For independent control, each Vertical Fogger must have its own unique control channels. Two or more Vertical Foggers may be set to the same address and share control channels for diagnostic purposes or if symmetric control is desired.

To set the DMX address:

1. Press MENU to enter the control menu.
2. Press ▲ or ▼ to scroll to Addr. Press ENTER.
3. Scroll to an address from 1 to 506.
4. Press ENTER to save the address setting.

Manual settings

The THRILL Vertical Fogger has a pushbutton that releases fog and activates the LEDs with the settings programmed for remote control channel 1. The button can be disabled to prevent unintended firing.

To enable or disable the manual pushbutton:

1. Press MENU to enter the control menu.
2. Press ▲ or ▼ to scroll to PbUt. Press ENTER.
3. Select on to enable the button, or oFF to disable it.
4. Press ENTER to save the setting.

The LEDs can also be controlled from the control panel. The settings are retained until the effect machine is operated by remote control or DMX, or is turned off.

To set the LEDs manually:

1. Press MENU to enter the control menu.
2. Press ▲ or ▼ to scroll to MAnU. Press ENTER.
3. Select an effect to set: strobe (Str0), dimmer (dIM), red (rEd), green (grEE), blue (bLUE), or premixed colors (COMA). Press ENTER.
4. Referring to the DMX commands below, scroll to the value from 0 to 255 that gives the desired look.
5. Press ENTER to save the setting.
6. Repeat steps 3-5 for each desired effect.

Remote control settings

Pressing a button on the remote control releases fog and lights the LEDs with a programmed or random color. The pushbutton uses the color programmed for button 1.

To program a color for each button:

1. Press MENU to enter the control menu.
2. Scroll to COLO. Press ENTER.
3. Scroll to CH 1. Press ENTER.
4. Select 0 to select no light, a number from 1 to 36 to select a premixed color, or rAnd for a random color.
5. Press ENTER to save the options for button 1.
6. Repeat steps 3-5 to program buttons 2, 3, and 4.

Display setting

The inut setting under diSP flips the display for easier reading.

Note that the display automatically enters sleep mode after a short period if no buttons are pressed. Pressing any button reactivates the display.

DMX operation

DMX operation provides access to the full range of features provided by the THRILL Vertical Fogger. The effect machine can be operated using any DMX compliant controller. Both 3-pin and 5-pin sockets are provided for data connection.

DMX control features

Fog

Fog output is controlled on channel 1. Output is either on or off. To prevent damage to the pump, monitor fluid level. Do not run the pump without fluid.

Strobe effects

A variable strobe effect is available on channel 2 along with pulse effects and random flash. Select one of the "open" values for steady light. At values from 0-7, the LEDs are off.

Dimming

The intensity of the light is controlled on channel 3 and increases with fader level.

Custom color mixing

The LEDs are individually controllable on channels 4, 5, and 6, allowing you to mix them in any combination. The amount of each color in the mix increases with fader level. To use custom color mixing, the premixed color function on channel 7 must be off.

Premixed colors

Channel 7 provides a "color wheel" effect with 36 premixed colors. You can also scroll continuously up or down through the colors or select random colors at slow, medium, or fast speeds. When selected, premixed colors override custom colors.

DMX commands

Ch.	Value	Function
1		**Fog**
	0-127	Fog output off
	128-255	Fog output on
2		**Strobe Effects**
	0-7	Light off (blackout)
	8-15	Light on (no flash)
	16-131	Strobe, slow to fast
	132-139	Light on
	140-181	Pulse effect, fast close/slow open
	182-189	Light on
	190-231	Pulse effect, fast open/slow close
	232-239	Light on
	240-247	Random strobe
	248-255	Open
3		**Dimmer**
	0-255	Dimmer intensity, 0-100%
4		**Red**
	0-255	Red intensity, 0-100%
5		**Green**
	0-255	Green intensity, 0-100%
6		**Blue**
	0-255	Blue intensity, 0-100%
7		**Premixed Colors**
	0-10	No premixed color
	11-190	Stepped scroll, colors 1-36
	191-192	No premixed color
	193-214	Continuous scroll, increasing, fast to slow
	215-221	Scroll stop
	222-243	Continuous scroll, decreasing, slow to fast
	244-247	Random color, fast
	248-251	Random color, medium
	252-255	Random color, slow

Getting started

1. Connect the Vertical Fogger effect machine to the controller as described in the Safety and Installation Guide.
2. At the controller, assign a DMX address to the machine.
3. Use the machine's control panel to set the same DMX address on the machine (see 'User Settings').
4. Check that the machine has fluid, is ready (Aδδρ is displayed on control panel), and can safely be triggered.
5. Trigger the machine's effects from the controller.
6. Monitor the fluid level. Refill the tank when low to avoid running the pump dry. *A flashing display indicates an empty fluid tank. Do not release fog until you have refilled the tank.*
7. When finished, turn off the machine and allow it to cool before handling. The nozzle remains hot for three hours.

Remote control operation

The THRILL Vertical Fogger comes with a 4-button wireless remote control with a range of 30 meters (100 feet). The 4 buttons can be used to trigger different combinations of fog and light. There are two parts: a transmitter and a receiver. Some transmitters may require a plastic insulator to be removed from the battery prior to use.

The receiver connects to the remote control socket on the machine and has a magnet on the back for attachment. The receiver's red LED indicates the machine is heating; when it goes off, the machine is ready to use.

- Remote control operation is disabled when the effect machine is controlled by DMX.
- The green LED and DIP switch on the receiver are not used.
- The remote control system looks similar to system used for the Martin RUSH SM 650 and RUSH SM 850, but components are not compatible. Unexpected results will occur if used in proximity to each other.

Getting started

1. Fill the fluid tank as directed above.
2. Connect the remote control receiver to the machine as described in the Safety and Installation Guide and apply power.
3. Install a battery in the transmitter as described below.
4. Use the control panel to program the remote control buttons as described under 'User Settings'.
5. Check that the machine has fluid and is ready (Addr is displayed on control panel and the red LED on the receiver is off). Also check that the machine can safely be triggered.
6. Press any button on the remote control transmitter until fog is released. Once the system has been primed, fog will be released instantly.
7. Press buttons on the remote control to trigger different looks.
8. Monitor the fluid level. Refill the tank when low to avoid running the pump dry. *A flashing display indicates an empty fluid tank. Do not release fog until you have refilled the tank.*
9. When finished, turn off the machine and allow it to cool before handling. The nozzle remains hot for three hours.

Installing the wireless remote control battery

The remote control transmitter uses a single 12-volt A23 (MN27) alkaline battery. To install or replace the battery:

1. Remove the screws from the back cover of the remote control. Remove the back cover.
2. If replacing, remove the old battery.
3. Insert fresh battery with negative terminal towards the spring.
4. Align the covers and replace the screw to close.

Manual operation

The effect machine can be operated manually simply by pressing the pushbutton. The color can be selected by programming remote control button 1. In addition, the LEDs can be manually programmed to light with the options in the MAnU menu. See 'Manual Settings' for options.

Before releasing fog, verify that the machine has fluid, is ready (Addr is displayed on control panel), and can safely be triggered.

Monitor the fluid level. Refill the tank when low to avoid running the pump dry. *A flashing display indicates an empty fluid tank. Do not release fog until you have refilled the tank.*

When finished, turn off the machine and allow it to cool before handling. The nozzle remains hot for three hours.

Maintenance

Do not open the housing, there are no user serviceable parts inside the fixture.

Disconnect the fixture from mains power before performing maintenance.

The user may carry out the maintenance operations described below. Do not attempt to repair a defective fixture. Refer all service to your Martin dealer or contact Martin directly for technical support through www.martin.com/contact-support.

Allow the fog output nozzle to cool completely before cleaning or servicing the effect machine. The nozzle remains hot for up to 3 hours after use.

Service the machine in a well-ventilated area where there is no risk of injury from failing parts, tools or other materials.

Cleaning

Excessive dust, fog fluid, and particle buildup degrades performance, causes overheating and will damage the effect machine. Damage caused by inadequate cleaning or maintenance is not covered by the product warranty.

Inspect effect machines within their first 100 hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Use gentle pressure only when cleaning, and work in a clean, well-lit area. Do not use any product that contains solvents or abrasives, as these can cause surface damage.

To clean the effect machine, vacuum or gently blow away dust and loose particles from the outside of the effect machine with low-pressure compressed air. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Check that the effect machine is dry before reapplying power.

Fluid system maintenance

Specially designed for optimum performance while providing longevity of the fluid system and heat exchanger, Martin Pro-Clean and Storage Fluid is the ultimate cleaning solution for Martin atmospheric effect machines. Using Martin Pro-Clean and Storage Fluid in the THRILL Vertical Fogger on a regular basis reduces clogging and extends its life.

Use Martin Pro-Clean and Storage Fluid at least once every 90 days. For best results, use it every 30 days or 200 hours of operation, whichever comes first.

Perform fluid system maintenance in a well-ventilated area as follows:

1. If there is fluid in the tank, run the machine until the fluid tank is nearly empty, but not completely dry.
2. Turn off the machine, allow it to cool, and disconnect from AC power.
3. Fill the fluid tank with Martin Pro-Clean and Storage Fluid as directed.
4. Reapply power and allow the machine to heat up.
5. Run the fluid through the system by operating the machine until the fluid tank is nearly empty, but not completely dry.
6. Refill the fluid tank with an approved fog fluid prior to use.

Preparing for storage

If storing the machine for an extended period of 30 days or more, clean the fluid system as described above. Do not refill the fluid tank until you are ready to use the machine again.

Replacing the primary fuse

If the fixture is completely dead, the primary fuse may have blown and it may be necessary to install a new fuse. Replace with a fuse of the same size and specified rating only. A spare fuse is located in the fuse holder, located directly below the AC input.

Troubleshooting

This section describes remedies for some possible problems.

Symptom	Potential cause	Remedies
Fixture appears dead	No power at AC cable inlet	Check power cable and circuit breaker
	Fuse blown	Check and replace fuse with one of same type and rating
Fog output is weak	Fixture requires priming	Press and hold the pushbutton until output is strong
Wet, greasy, non-uniform output, fluid drips or spits from nozzle, or loud noise when firing machine	Incompatible fog fluid	Discard fluid. Perform fluid system maintenance.
	Clogged fluid line	Perform fluid system maintenance
No fog output	Machine not ready	Allow machine several minutes to heat up
	Fluid level low	Add fluid
	Hose too high	Check that fluid hose reaches bottom of fluid tank
	Wireless remote control out of range	Move closer to effect machine
	Wireless remote control battery exhausted	Replace battery
No light output	Dimmer channel value too low	Increase dimming level on channel 3
Fixture does not respond to DMX control	Fault in the DMX network due to connector or cable damage, incorrect DMX addressing, or potential interference from proximity to a high voltage installation.	Verify that DMX address matches address set on DMX control device Check DMX cables and connections. Ensure that DMX link is terminated Move or shield link if it is close to an unshielded high-voltage installation

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