READ AND SAVE THESE INSTRUCTIONS

P/N 35010041-D

RUSH CLUB SMOKE DUAL™

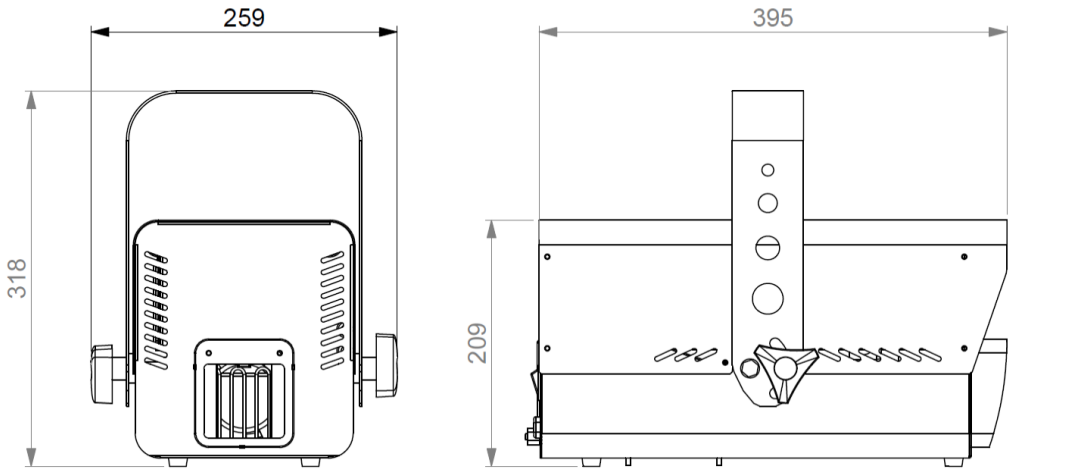
user manual

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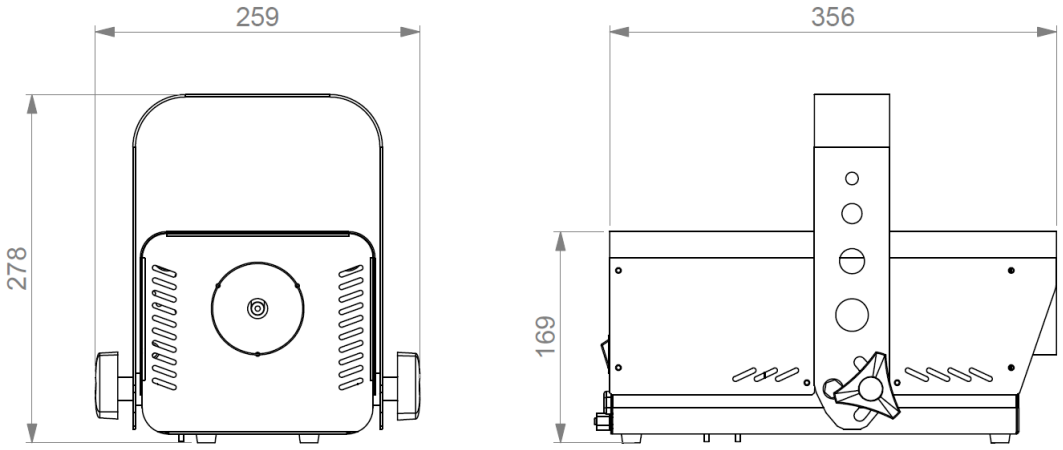
Dimensions/Legal

All dimensions are in millimeters

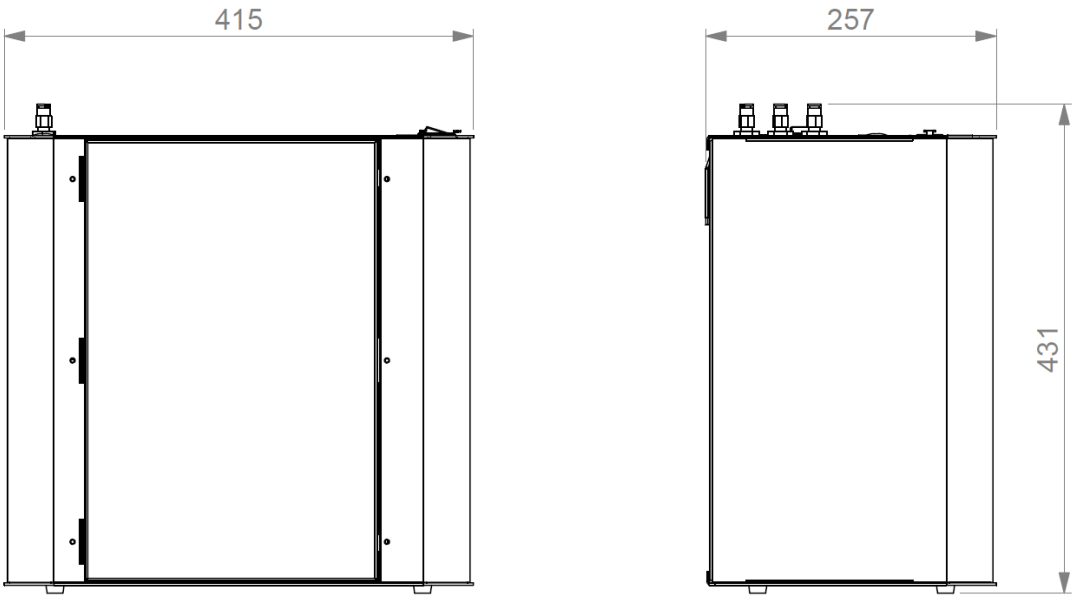
Haze Head



Fog Head



Pump Unit



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Document Revision - **D**

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Safety information

Read the safety precautions in this manual before installing, operating or servicing this product.

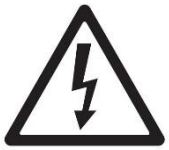
The following symbols are used to identify important safety information:



Caution! Safety hazard. Risk of severe injury or death.



Caution! Burn hazard. Hot surface. Do not touch.



Danger! Hazardous voltage. Contact will cause electric shock.



Caution! Fire hazard.

Warning! This product is not for household use. It presents risks of injury due to electric shock, burns, falls and respiratory problems!

Read this manual before operating the machines, follow the safety precautions listed below, and observe all warnings in this manual and printed on the machines. Use the machines only as described in this manual and in accordance with local laws and regulations.

If you have questions about how to operate the machines safely, or if you have followed the instructions in this manual and the machines are malfunctioning, please contact Martin Service and Support.

Preventing electric shocks

- Always ground (earth) the machines electrically.
- Use only a source of AC power that complies with local building and electrical codes, and that has both overload and ground-fault protection.
- Before connecting the machines to power, check that the voltage indicated on the machine's serial label matches your local AC power voltage. If your AC power voltage does not match, do not use the machine. Contact Martin Service and Support for assistance.
- Before using the machines, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- If the machines or any cables connected to it are in any way damaged, defective, wet, or show signs of overheating, stop using the machines and contact Martin Service and Support for assistance. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- Disconnect the machines from AC power before servicing and when not in use.
- These machines are not waterproof and should not be exposed to wet outdoor conditions. Do not immerse in water or any other liquid. Do not expose to high-pressure water jets.

- Do not spill fluid over or inside the machines. If fluid is spilled, disconnect AC power and clean with a damp cloth. If fluid is spilled onto electronic parts, take the machines out of service and contact Martin Service and Support for advice.
- Do not remove the covers or attempt to repair a faulty machine. Refer any service not described in this manual to Martin Service and Support.
- Do not operate the machines if any parts are damaged, defective or missing.
- Moisture and electricity do not mix. Do not aim effect output at electrical connections or devices.

Preventing burns and fire





- The atmospheric effect produced by these machines is hot enough to cause burns when it leaves the nozzle, and very hot droplets of fluid escape occasionally. Keep people and objects at least 600 mm (24 in.) away from the effect output nozzles.
- Do not touch the effect output nozzles during or after use – it becomes extremely hot and remains hot for several hours after the machines have been shut down.
- Effect output contains glycol, a flammable alcohol that burns with an almost invisible blue flame. Do not point effect output at sources of ignition such as open flames or pyrotechnic effects.
- Do not attempt to bypass thermostatic switches, fluid sensors or fuses.
- Replace fuses only with ones of the type and rating specified in this manual for the machines.
- Provide a minimum free space of 100 mm (4 in.) around the machines.
- Provide a minimum free space of 500 mm (20 in.) around fans and air vents and ensure free and unobstructed airflow to and around the machines.
- Keep the machines at least 600 mm (24 in.) away from combustible and heat-sensitive materials.
- Do not operate the machines if the ambient temperature (Ta) is below 5° C (41° F) or above 40° C (104° F).
- Do not operate the machines if the relative air humidity exceeds 80%.

Preventing injuries

- Fasten the machines securely to a fixed surface or structure when in use. The machines are not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- If suspending from a rigging structure, fasten the machines to a rigging clamp. Do not use safety cables as the primary means of support.
- If the machines are installed in a location where it may cause injury or damage if it falls, install as directed in this manual a secondary attachment such as a safety cable that will hold the machines if a primary attachment fails. The secondary attachment must be approved by an official body such as TÜV as a safety attachment for the weight that it secures, must comply with EN 60598-2-17 Section 17.6.6 and must be capable of bearing a static suspended load that is ten times the weight of the machines and all installed accessories.
- Check that all external covers and rigging hardware are securely fastened.

- Block access below the work area and work from a stable platform whenever installing, servicing or moving the machines.
- Do not operate the machines with missing or damaged covers or shields.
- In the event of an operating problem, stop using the machines immediately and disconnect them from power. Do not attempt to use a machine that is obviously damaged.
- Do not modify the machines in any way not described in this manual or install other than genuine Martin parts.
- Refer any service operation not described in this manual to a qualified technician.
- Effect output can cause condensation. Do not point the output at smooth floors. Floors and surfaces may become slippery. Check these frequently and wipe dry as necessary to avoid any danger of slipping.
- Ensure at least 2 m (6.6 ft.) visibility in areas where effect is being produced.
- Effect fluid contains food-grade glycols in solution that may present health risks.

  IF SWALLOWED: Do not induce vomiting. Drink 1-2 glasses of water and seek medical attention.

  AVOID CONTACT WITH SKIN AND EYES: In case of accidental contact: **EYES:** Hold eyes open and flush with water for ten minutes, seek medical attention if irritation persists. **SKIN:** Remove contaminated clothing and rinse skin for 20 minutes, seek medical attention if irritation persists.

  Consult the fluids' SDS for more detailed safety information at http://www.martin.com/safety-documents
- These machines is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machines by a person responsible for their safety. Children should be supervised to ensure that they do not play with the machines.

Preventing breathing problems



- These machines can operate safely only with the effect fluid they are designed for. Use the machines only with fluids specified under “Effect fluid types” on page 23 or you may cause the release of toxic gases, presenting a severe health hazard. You will also probably damage the machines.
- Do not create dense atmospheric effects in confined or poorly ventilated areas.
- Do not expose people with health problems (including allergic and/or respiratory conditions such as asthma) to atmospheric effects.
- Do not point effect output directly at a person’s face or at face height.

For the latest user documentation and other information for this and all Martin products, please visit the Martin website at http://www.martin.com
If you have any questions about how to install, operate or service the machines safely, please contact your Martin distributor, dealer, or contact Martin Service and Support.

Product overview

Product description

The RUSH Club Smoke Dual is a top of the range atmospheric system from Martin Professional featuring multiple remote fog or haze heads with a base pump/fluid unit. Its remote heads allow the base unit to be conveniently located for fluid refills while the heads can be positioned in the ideal location for even fogging or hazing of the venue.

Designed using the latest fog system technology, the RUSH Club Smoke Dual is capable of generating a variable level of fog or haze from up to 6-heads controlled in pairs, which are connected using a simple push together fluid line and a single control cable.

Congratulations on your purchase of the RUSH Club Smoke Dual from Martin. Details of the full range of Martin products are available on our website at www.martin.com.

Features at a glance

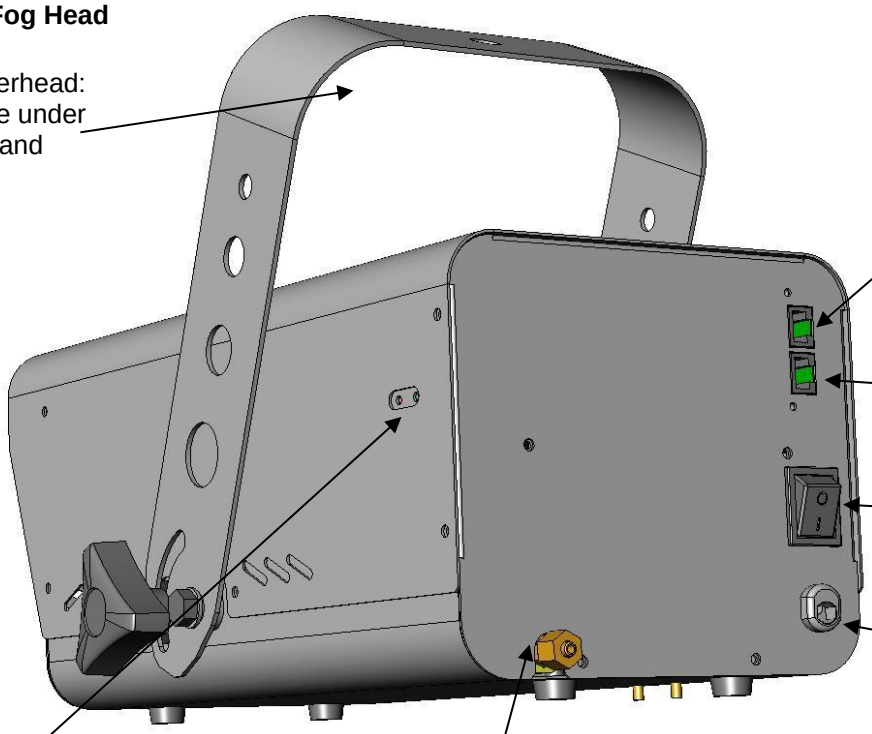
- 1-6 haze or fog heads per system
- One hybrid fluid produces both fog and haze
- 10 l Concealed fluid reservoir
- Continuous effect output
- Proportional control of haze and fan (haze heads)
- On-board digital control panel with fast access keypad (pump unit)
- RJ45 connection from base to heads
- Independent 3-zone control via DMX
- External 25 l fluid connection (optional accessory)
- Installation materials included
- Optional external fluid connection and Digital Remote Control

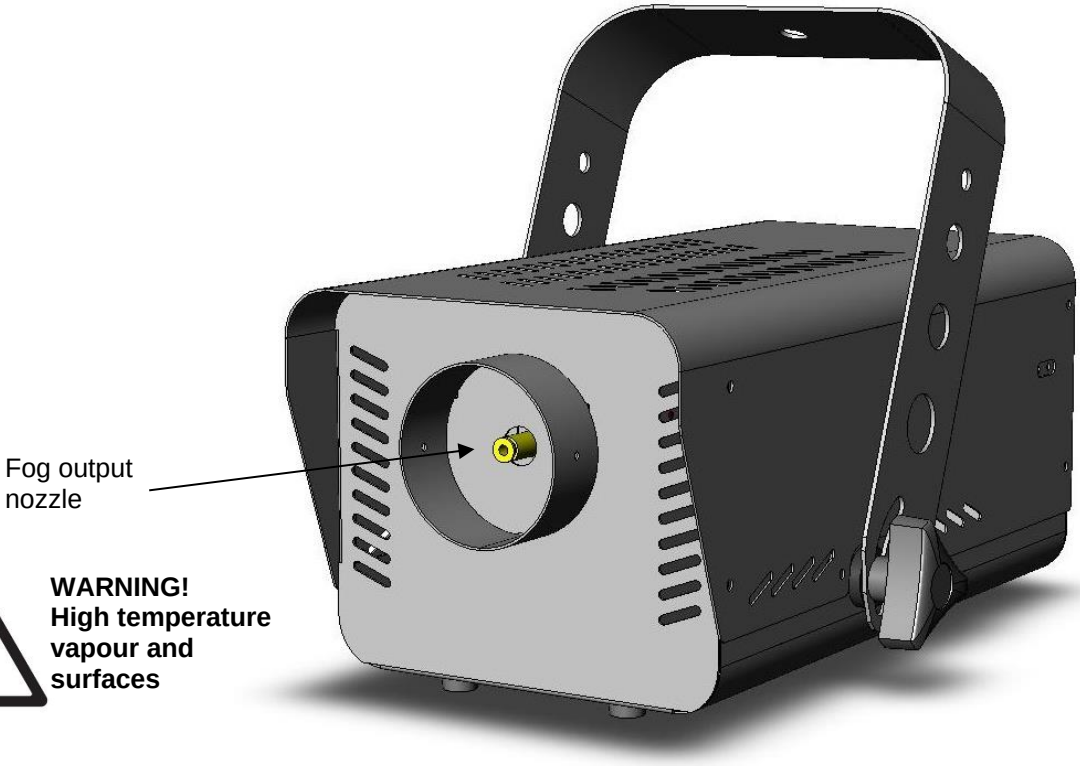


Use only RUSH Club Smoke Dual Fluid. Use of other fluid will void warranty.

Product details

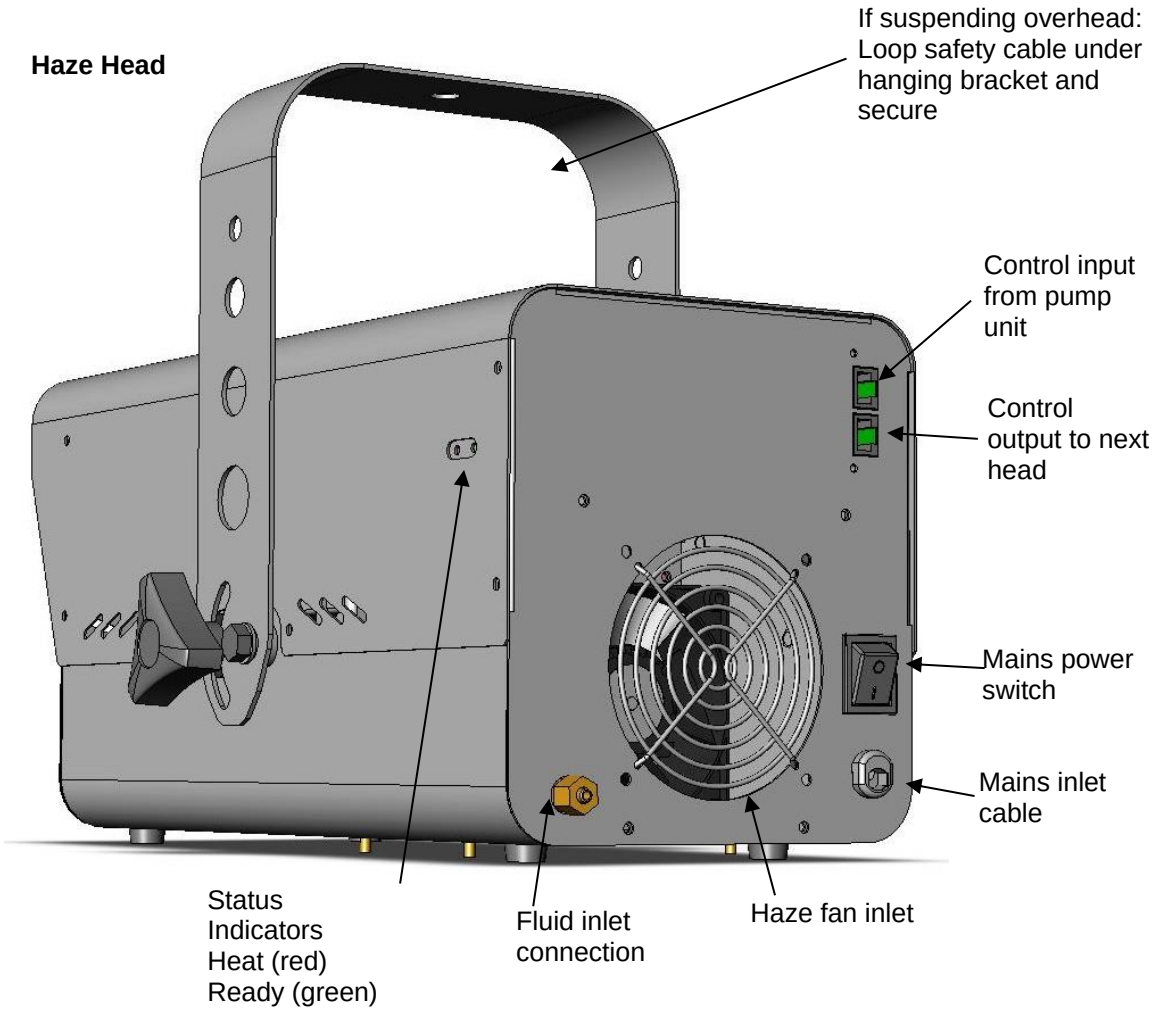
Fog Head

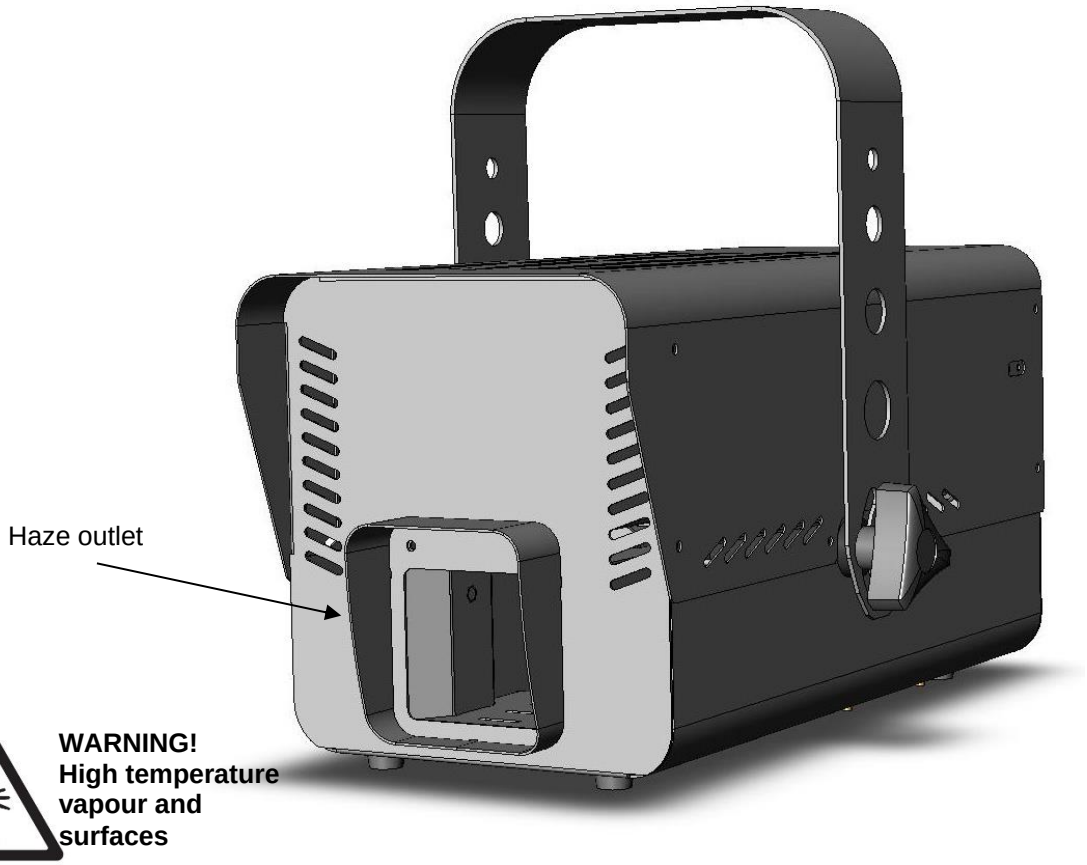




WARNING!
High temperature vapour and surfaces

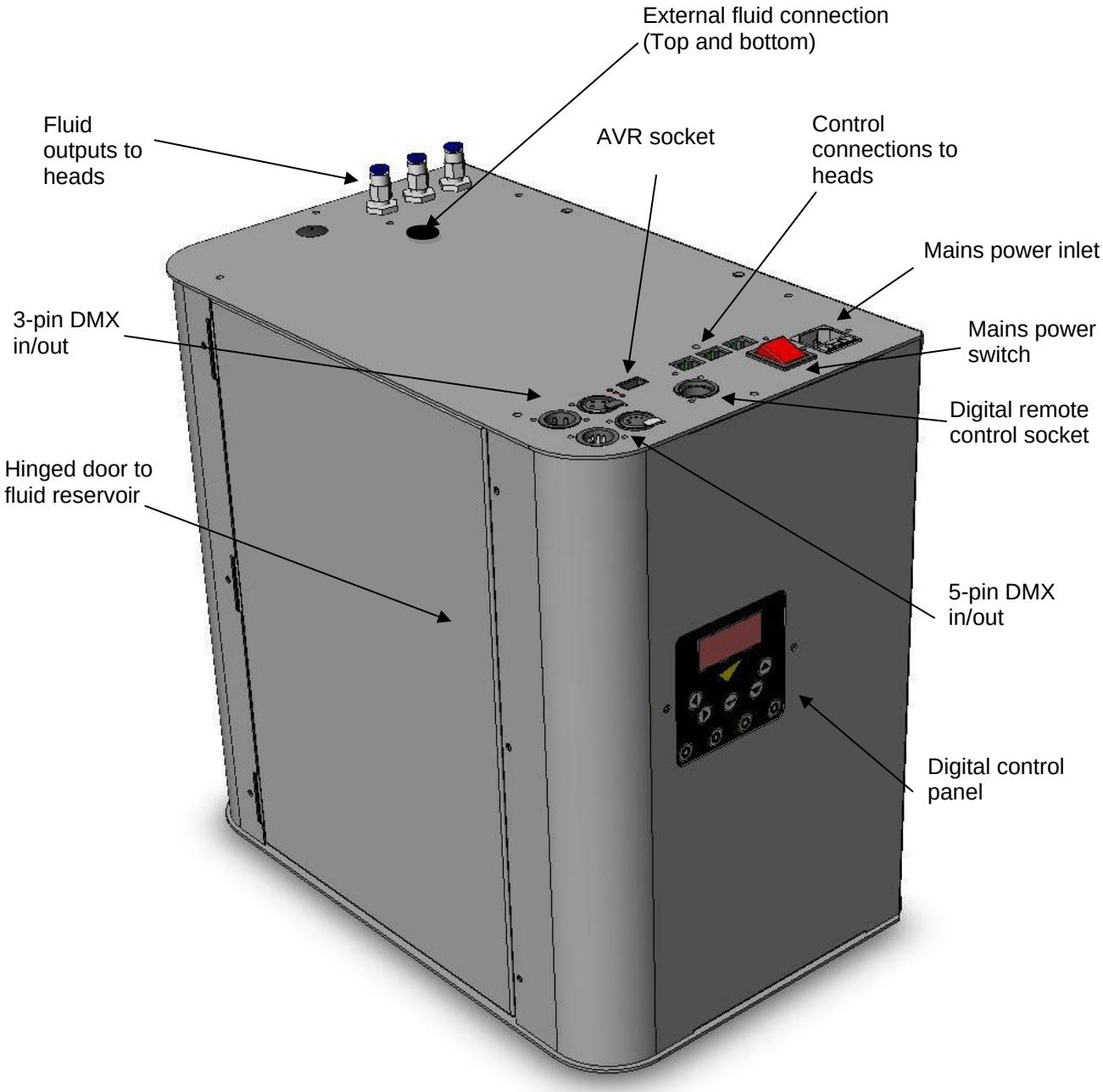
Haze Head





WARNING!
High temperature vapour and surfaces

Base pump unit



Quick Start

You are no doubt eager to switch on the system and try it out by making a lot of fog and haze. This section tells you how to do that. However, please also make the time to read the safety and servicing instructions in the remainder of this manual.

Setting up

Locate the head(s) in a suitably large area with nothing in front of the effect outlets.

Connect the fluid tubes from the head units to the base unit. A maximum of 2 heads of the same type (fog or haze) can be connected to each output on the base unit. If you are connecting 2 heads, use a T-connector to link the tubes.

Connect the heads to the base unit with RJ45 control cables. If you are connecting 2 heads to an output, the second head is linked from the first.

Fill the fluid reservoir in the base unit with RUSH Club Smoke Dual Fluid only. Use of other fluid will void the warranty.

Connect a suitably rated power supply to the heads and to the base unit using the supplied IEC cable. The power requirements are:
Base unit
0.9 A @ 230 V (EU model)
1.7 A@ 120 V (US model)
Fog Heads
5.1 A @ 230 V (EU model)
8.6 A @ 120 V (US model)
Haze Heads
4.0 A @ 230 V (EU model)
7.6 A @ 120 V (US model)

Now set the mains switches, on the rear of each head and on the top of the base unit, to the 'ON' position. The display will show **HEAT**. If the display shows **OFF** use the menu panel to set the RUNF option to CONT. After about 6-8 minutes the display should show **CONT** and the system will begin producing fog/haze. If the display shows **RDY** use the menu panel to set the RUNF option to CONT to start fog.

Once the system has heated the first time you will need to prime the pipework using the 4 prime buttons at the bottom of the control panel.

Making fog and haze

If you want to adjust the fog density manually, press the Menu < > buttons until the display shows **FOG**, then press the Enter button and use the Value up/down buttons to select a value above 0%. The Fog/Haze density can be adjusted using the **HAZE** menu the same way.

You can also adjust the fan speed using the **FAN** menu.



If no fog/haze is produced it may be necessary to prime the system, press the Menu <> buttons until the display shows PRME, then press the Value Up button so the display shows Y, then press the Enter button.

Installation and setting up



DANGER! DO NOT operate the system until you have read and observed all the precautions listed under “Safety information” on page 5.

Location

The RUSH Club Smoke Dual heads are designed to be located on the floor or may be suspended using the hanging bracket. The heads can operate in any orientation from vertically down to vertically up. They must not be used upside down.

If the heads are to be suspended, ensure the mounting surface can support the weight of the head. Do not suspend the heads over areas where people will be underneath. Use only the hanging bracket to suspend the head.

Ensure that there is at least 100 mm (4 in.) clearance all-round the head and at least 600 mm (24 in.) in front of the effect output.

The base pump unit can be located in any convenient location, but must be within 10 m (32.8 ft.) of the furthest haze head or 50 m (164 ft.) of the furthest fog head. It must be the lowest point of the system and not more than 10 m (32.8 ft.) below the highest head. Keep 150 mm (5.9 in.) clearance around the unit and 300 mm (11.8 in.) above the unit.

AC power

Before using the system, ensure that a grounding-type (earthed) power plug that fits the local power outlets is installed on the mains cable provided and on the mains cable of each head.



DANGER! Make sure the power plug is correctly rated:
- For EU (230 V) use fit a plug rated 6 A minimum
- For US (120 V) use fit a plug rated 10 A minimum

When installing the plug, follow the plug manufacturer’s instructions and connect pins as follows:
Yellow and green wire to ground (earth), blue wire to neutral and brown wire to live.

The table below shows some common pin identification schemes.

wire	**function**	**marking**	**screw colour**
brown	live	“L”	yellow or brass
blue	neutral	“N”	silver
green/yellow	earth	⏚	green

Before connecting the system to power, verify that the AC supply is adequately dimensioned for the current draw of the system.
Base unit
0.9 A @ 230 V (EU model)
1.7 A @ 120 V (US model)
Fog Heads
5.1 A @ 230 V (EU model)
8.6 A @ 120 V (US model)
Haze Heads
4.0 A @ 230 V (EU model)
7.6 A @ 120 V (US model)

Check that the local AC voltage is appropriate, as indicated on the system's serial number label. If your AC voltage is outside the appropriate range, do not use the system. Contact Martin Service and Support for assistance.

Setting up

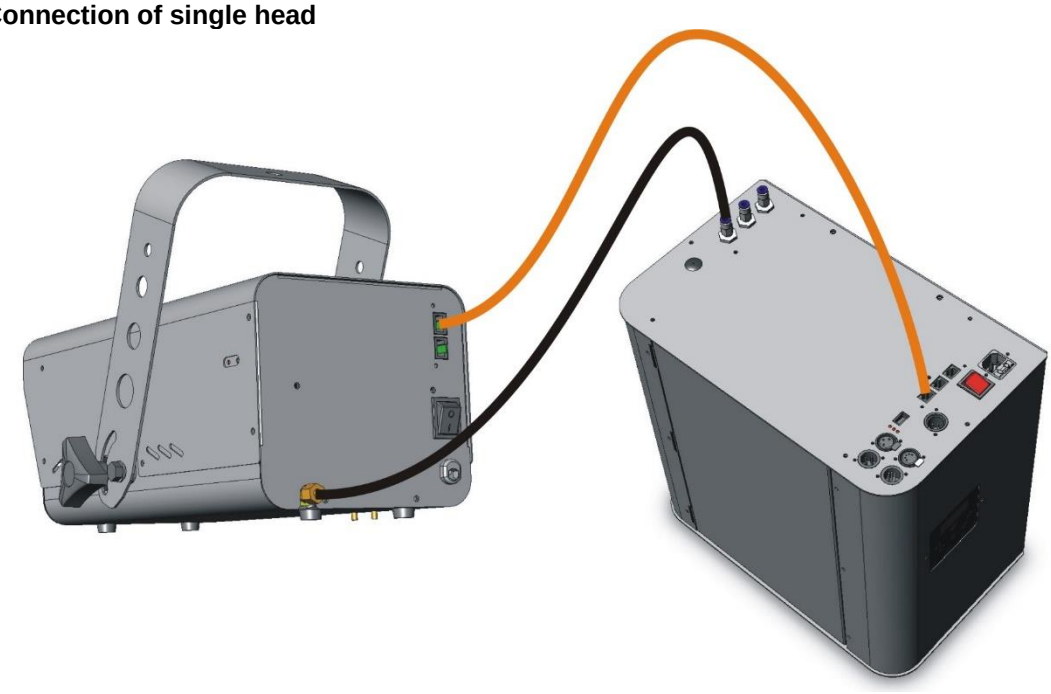
Fill the fluid tank only with Martin RUSH Club Smoke Dual Fluid (see page 23).

Up to two heads of the same type (fog or haze) may be connected to each fluid output of the pump unit. Push the fluid tubing into the connections on the head and the pump unit and secure on the heads using the locking screw. If two heads are being connected to an output, a T-connector must be fitted in the fluid tubing.

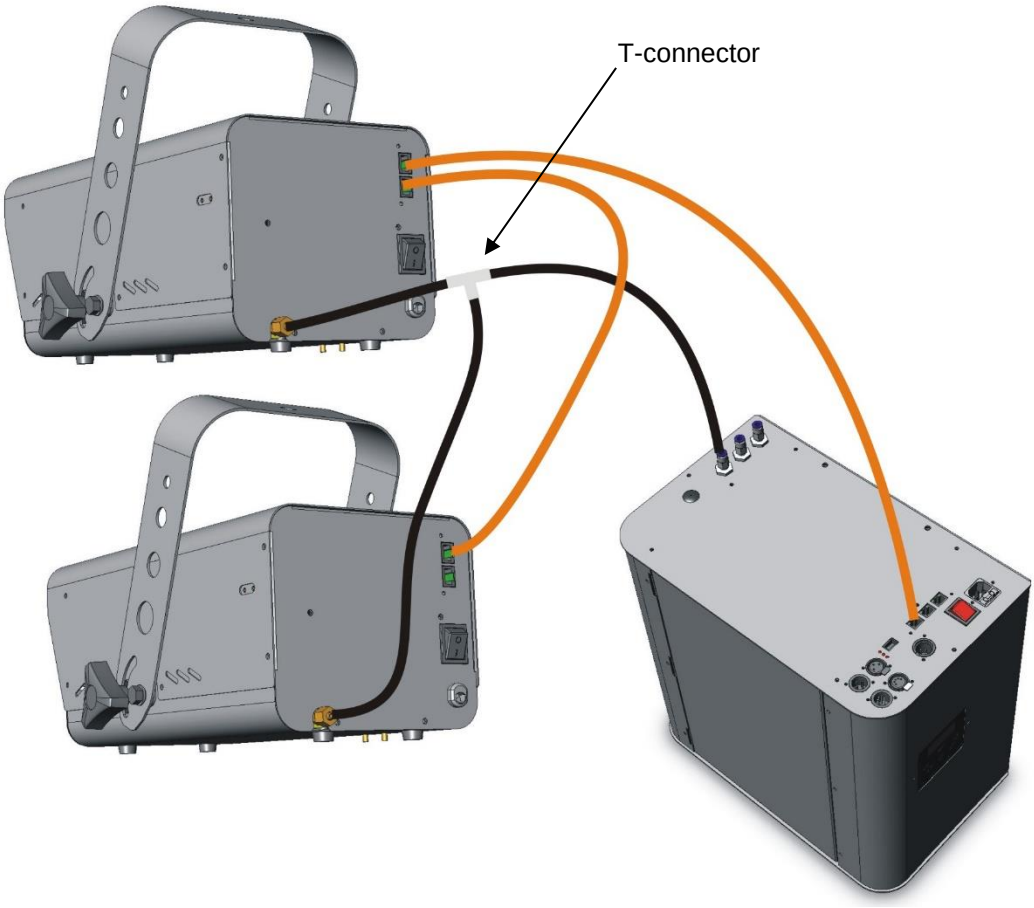
It is recommended that if you are using Haze heads you should connect them to channel 1

Connect the RJ45 control connection on the heads to the pump unit. If two heads are being connected to a channel, use the RJ45 link output on the first head to connect the second head. The RJ45 connectors are linked together internally and can be used as either an input or an output.

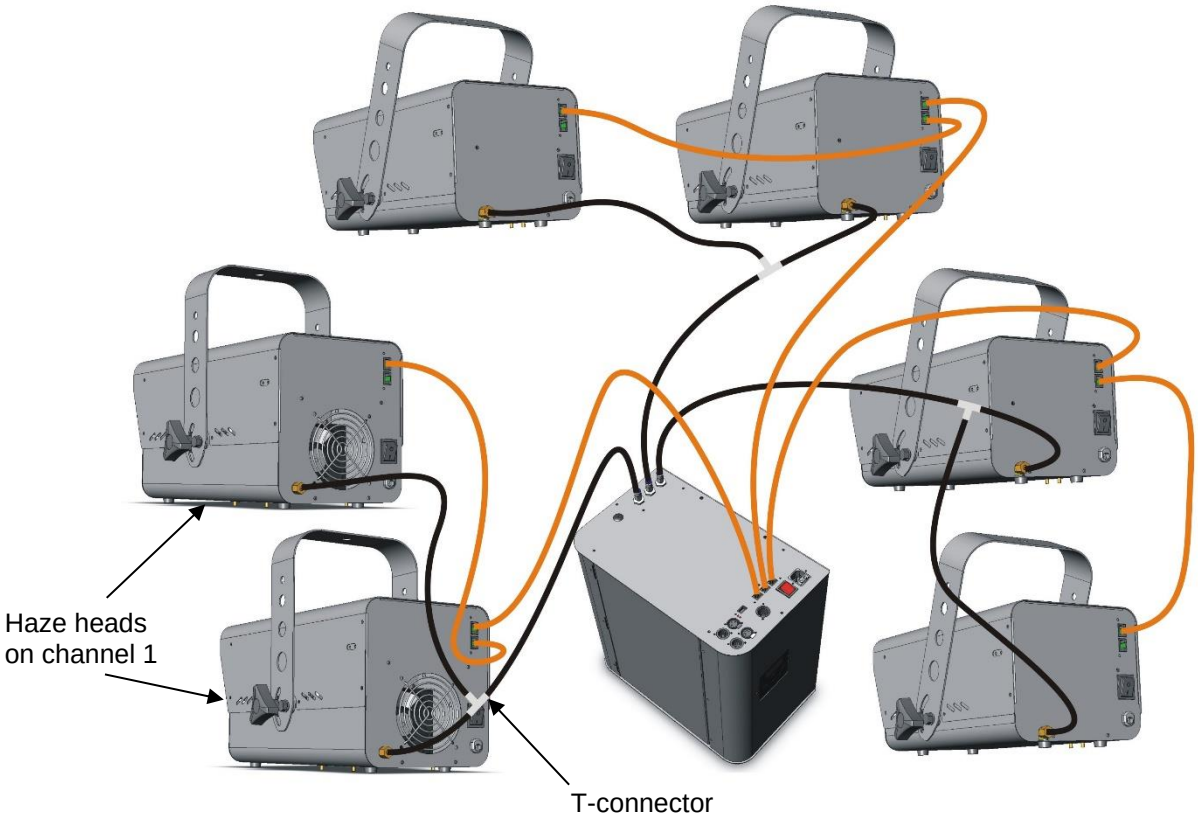
Connection of single head



Connection of two heads on one channel



Connection of fully loaded system



If DMX control is being used, connect the base unit to the DMX line (see page 21). If the Digital Remote Control is being used (optional accessory), connect the remote to the Remote socket (see page 9).

Final checks

Before applying power to the system, verify the following:

- the system is safely located or installed and meets the location requirements stated on page 13
- the operator is familiar with, and able to comply with, the requirements for safe operation listed on page 5.
- the fluid is one of the genuine Martin fluids listed under fluid options on page 23.
- the system is electrically grounded (earthed)
- the AC power distribution circuits and lines are adequately rated for the current load

Turning on the power

Ensure the power switch on each head is turned on. Turn on the main power switch on the base unit located next to the power inlet. The display will show **HEAT.** If the display shows **OFF**, go to the RUNF menu on the digital control panel and set the option to **CONT**. The system will remember its state from when it was turned off last time, so it will only power up in OFF mode if you have previously disabled the heaters.

After about 6-8 minutes if no DMX is connected the display should show **CONT** and the system will begin producing fog/haze. If the display shows **RDY** go to the RUNF menu and set the option to **CONT** to start fog/haze. If DMX is connected, the display will show **DMX** when the system is ready.

Each head has a red and green light on the side to indicate heating status:
RED: Heating
GREEN: Ready
Once the Ready light has come on, the head will continue to heat for a time, and the heater will cycle on and off to maintain the temperature.

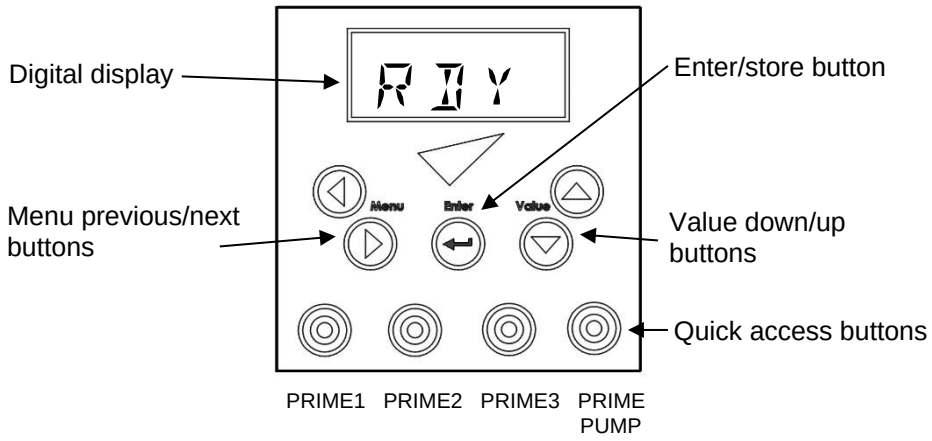


*The first time you run the system after connecting fluid pipes you will need to prime the system. See section "*Priming system with Quick access buttons*" on page 19.*

Control settings

Overview

The **Digital Control Panel** on the side of the base unit allows you to configure the system using option menus.



The brightness of the display can be changed to LOW, NORM or HIGH using the DISP menu option.

Setting Fog Run modes

The RUNF menu sets the operational mode of the Fog heads in the system, and can also be used to shut down the heaters in the heads. Settings are Off (shutdown, heaters off), Standby (heaters remain on), Timer mode or Continuous mode.

Use the Menu Previous / Next buttons to select the RUNF option.
Use the Up/Down buttons to select OFF, STBY, TIME, CONT.
Press the Enter button to store the setting. The display shows SET.

Selecting OFF will disable the heaters on the unit.

Setting output density for Fog heads

Use the Menu Previous / Next buttons to select the FOG option.
Use the Up/Down buttons to select the density from 0% – 100%.
Press the Enter button to store the fog setting. The display shows SET.

If you want to temporarily change the fog density, do not press Enter. The fog setting will go back to its stored value next time the system is powered up. This applies to all options.

Setting Haze Run modes

The RUNH menu sets the operational mode of the Haze heads in the system, either Standby, Timer mode or Continuous mode.

Use the Menu Previous / Next buttons to select the RUNH option.
Use the Up/Down buttons to select STBY, TIME, CONT.
Press the Enter button to store the setting. The display shows SET.

Setting output density for Haze heads

Use the Menu Previous / Next buttons to select the HAZE option.
Use the Up/Down buttons to select the density from 0% – 100%.
Press the Enter button to store the haze setting. The display shows SET.

Setting the Timer

Select the TIME option from the RUN menu.
Then set the TRUN and TOFF values from the menu.
The TRUN and TOFF values are set in seconds and are in the range 0-99. The Fog and Haze values are taken from the menu settings for Fog and Haze. The timer will cycle continuously until the run menu is changed.
Use this mode for maintaining a low level of fog in smaller venues.



When the timer is running and the display is not showing a menu, the display shows TRUN or TOFF as the timer cycles between run and off modes.

Setting the DMX start address

Use the Previous / Next buttons to select the ADDR option.
Use the Up/Down buttons to set the DMX start address from 001 to 509. If you hold down the button the address will count up or down.
Press the Enter button to store the address setting.
The system will automatically respond to a DMX controller whenever it is connected.

When using in a DMX system ensure the LINK menu is set to RECV (the default setting) to avoid causing DMX errors to other devices on the system.

Setting the master-client link mode

It is possible to control several systems from one digital remote. The system with the remote plugged into it becomes the Master. The other systems are Clients. The systems are interconnected with DMX cabling.

Use the Previous / Next buttons to select the LINK option.
Use the Up/Down buttons to select RECV (client unit) or SEND (master unit).
Press the Enter button to store the link setting.

The system should be set to SEND only if it is running as a master. If running as a client, stand-alone or DMX controlled it should be set to RECV. If a system set to SEND is connected to an active DMX system, the DMX will be corrupted causing flickering of lights and other strange symptoms.

Priming the system after fluid out

If the system runs out of fluid it will automatically shut down and show FLU OUT on the display to prevent damage to the pump. To suck the new fluid back into the system and reset the FLU OUT error, replace/refill the fluid reservoir and use the prime function.

- To prime the pipework in between the pump units and the heads after installation, use the 4 quick access buttons below the display to prime outputs 1, 2 ,3 or the base independently. See next section.

Use the Previous / Next buttons to select the PRME option.

Use the Up/Down buttons to change the option to Y.
Press the Enter button to start the priming function.

The pump unit will pump at full power for a short time to purge air from the pipes inside the unit.
To exit this menu if you decide not to activate the Prime function, select N and press Enter.

Priming system with Quick access buttons

The four quick access buttons below the display are used for priming the system.

The three left hand buttons will prime the outputs to heads 1, 2 and 3 independently. This is used to expel air from the pipes between the pump unit and the heads after installation. Priming continues while the buttons are held down and stops when the buttons are released.



The heads must be in "Ready" state for the output prime function to operate. Keep the button held down until fog/haze is produced from the head.

The right hand button runs a timed sequence to prime the base unit and is normally used when replacing fluid. This will also reset the Fluid Out error.
The heads do not need to be in "Ready" state for the base prime function to work, and no fog/haze will be produced.

Resetting options to factory settings

The factory settings configure a standard mode of operation for the system.

Use the Previous / Next buttons to select the RSET option.
Use the Up/Down buttons to change the option to Y.
Press the Enter button to reset all options.

To exit this menu if you decide not to reset the options, select N and press Enter.

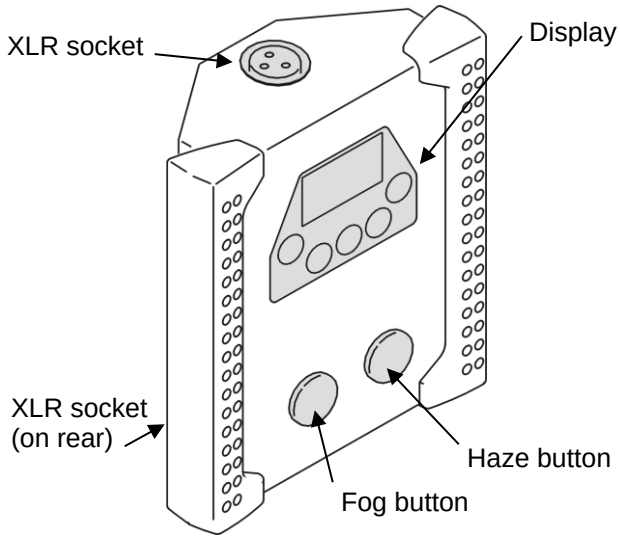
The factory settings are:

option	setting
FOG	10%
HAZE	10%
TRUN	10 seconds
TOFF	20 seconds
RUNF	OFF
RUNH	OFF
ADDR	001
DISP	NORM
LINK	RECV
PRME	N

Remote control

Overview

The digital remote control, available separately (P/N 92765043), may be used for remote control of the RUSH Club Smoke Dual. Several systems may be controlled from one remote using the LINK function (see page 18).



Functions

The remote control provides the following functions:

- Fog button: turns fog head output on and off. Press once to start output from fog heads and again to stop.
- Haze button: turns haze head output on and off. Press once to start output from haze heads and again to stop..
- Fog level setting (FOG = 0 -100%)
- Haze level setting (HAZE = 0 -100%)
- Timer run time/off time settings (TRUN = 0 -99 seconds, TOFF = 0-99 seconds)
- RunF – run mode for fog heads (RUN = OFF, STBY, TIME, CONT)
- RunH – run mode for haze heads (RUN = STBY, TIME, CONT)

The functions are the same as on the built in control panel and are described on page 13.

The **RUN** menu duplicates the functions of the Fog and Timer buttons. The buttons are simply a quick way to control this menu function.

Connection

The remote control has two identical XLR connectors on the top and back for connection to the RUSH Club Smoke Dual system. The back connector allows the remote to be mounted into a panel or console. Plug the cable provided with the remote control into either of these sockets and into the 3-pin XLR plug nearest the mains switch on the top panel of the base pump unit (not the 3-pin DMX plug).
The remote control is powered through its cable by the RUSH Club Smoke Dual; no batteries are required.
The cable may be extended to up to 25 m (82 ft.) with a 3-pin XLR DMX cable.

DMX control

Overview

DMX is a digital control system widely used in entertainment and architectural lighting. Any controller meeting the DMX-512A standard may be used to control and program the fog output of the RUSH Club Smoke Dual.

When a DMX signal is present, the RUSH Club Smoke Dual stand-alone functions do not work. To fire the unit from the control panel or remote control, the DMX controller must be powered off or disconnected.

Connection

The RUSH Club Smoke Dual system provides 3- and 5-pin XLR connectors on the top of the base pump unit for DMX connection.

You can use either the 3- or 5-pin connectors for input or output, but you should not use the unit as a splitter by connecting both the 3- and 5-pin outputs.

For best results, use cable designed for high-speed digital data transmission.

DMX functions

The RUSH Club Smoke Dual start address must match the DMX start address allocated to it on your controller. To set the address, see “18” on page 18. The RUSH Club Smoke Dual requires 4 DMX channels.

For example if the RUSH Club Smoke Dual is set to DMX address 100, channel 1 will be controlled by address 100, channel 2 will be controlled by address 101, channel 3 by address 102 and channel 4 by address 103.

When the system is at running temperature and is under DMX control it displays DMX.

The functions of each DMX control channel are shown on the following page.

Channel 1	DMX value range	Function	Macro description	Default value
Fog/haze output 1 level	0-12	Idle range	None	0
	13- 240	Output 0-100%		
	241 -255	Output 100%		

Channel 2	DMX value range	Function	Macro description	Default value
Fog/haze output 2 level	0-12	Idle range	None	0
	13- 240	Output 0-100%		
	241 -255	Output 100%		

Channel 3	DMX value range	Function	Macro description	Default value
Fog/haze output 3 level	0-12	Idle range	None	0
	13- 240	Output 0-100%		
	241 -255	Output 100%		

Channel 4	DMX value range	Function	Macro description	Default value
Special functions	0-50	Idle range	None	0
	51-100	Prime base station	5 seconds within range to activate once	
	101-150	Not used		
	151-200	Heater off & shutdown	5 seconds within range to activate once	
	201-255	Heater on (normal operation)	None, but heaters will stay on if channel 4 returns to zero	

Effect fluid types

The RUSH Club Smoke Dual must only be used with RUSH Club Smoke Dual Fluid. Martin supplies high quality fog fluids that are based on ultra-pure deionized water. No other fluid is suitable for use.

RUSH Club Smoke Dual Fluid
Specially formulated for the RUSH Club Smoke Dual System, this hybrid water-based fluid produces both a medium-density fog and a translucent haze for the ultimate combination of atmospheric effects. RUSH Club Smoke Dual Fluid is designed as an economy fluid that is suitable for use in nightclubs, bars, stage and outdoor events.

Available in 5, 25, and 220 l containers.

To find your local dealer visit **www.martin.com**



DANGER! The RUSH Club Smoke Dual can run safely only on the specific effect fluid it is designed for. Use ONLY the RUSH Club Smoke Dual Fluid as designated in this manual. NEVER use any other type of fluid, or toxic gas may be produced. You will probably also cause damage to the system that will invalidate the product warranty. Do not dilute effect fluid with water or any other liquid. Discard effect fluid if it becomes contaminated.

Basic service



Before servicing the RUSH Club Smoke Dual, read and observe all the precautions listed in “Safety information” on page 5. Any service not described in this section must be carried out by a Martin service technician.

To find your local Martin service center visit **www.martin.com**

Cleaning

Excessive dust, effect fluid, and dirt build-up will degrade performance and cause overheating and damage to the system that is not covered by the product warranty. To maintain adequate cooling, dust must be cleaned from the outer casing and air vents of the system periodically.



Isolate the system from power and allow to cool completely before cleaning. The fog/haze output nozzles remain hot for a period after use.

- Remove dust from the air vents with a soft brush, cotton swab, vacuum, or compressed air.
- Clean effect fluid residues from the fog/haze output of the system using a damp cloth.
- Clean the outer casing with a damp cloth only.

Martin Pro-Clean and Storage Fluid

Martin Pro-Clean & Storage Fluid is specially designed for optimizing performance while providing longevity of any effect machine. Martin Pro-Clean & Storage fluid is the ultimate cleaning solution for Martin atmospheric effect heat exchangers. This advanced preventative maintenance fluid has been utilized by Martin service technicians for years of both cleaning and storing effect machines. Utilizing Martin Pro-Clean & Storage Fluid on a regular basis reduces clogging and further extends the life of your Martin atmospheric effect machines. By using the highest grade chemicals available while remaining eco-friendly, Martin fluids are both effective and safe.

Instructions for use

Use fluid directly from container, **do not dilute**. Remove cap and safety seal; if inner safety seal has been tampered with, return product to point of purchase. Disconnect effect machine from power source before filling reservoir. When possible, remove reservoir from machine and carefully fill reservoir to desired level, taking care not to overfill or spill. Wipe up any spilled fluid with a damp cloth. Replace cap on container and store upright in a secure location.

Cleaning and Preventative Maintenance Procedure:

Use Martin Pro Clean and Storage Fluid after every 200 hours of operation or monthly depending on usage and duty cycle. In a well-ventilated area temporarily connect Martin Pro Clean and Storage Fluid to the effect machine being serviced or fill the machines provided fluid reservoir. Allow the machine to fully heat. When machine is ready activate the machine to run continuously for 30-45 minutes; use a timer function if available.

Storage Procedure:

Perform the above cleaning and preventative maintenance procedure. After procedure is completed simply run the machine until all fluid has been visibly purged from the fluid inlet tubing to prevent leaks and seepage.

Fuse replacement

The fuses for the system are located on the electronics board inside the units.



DANGER! Disconnect the power supply before removing any covers. Live parts inside!

To replace a fuse, disconnect the power cord from the supply, unscrew the screws holding the top cover of the unit and remove the cover. The electronics board is located in the compartment under the display.

Remove the spent fuse and replace with one of exactly the same size and rating. The fuse type is indicated below. Contact Martin Service if the fuse blows repeatedly.

Fog head
- 120 V = 10 AT
- 230 V = 6.3 AT

Haze head
- 120 V = 10 AT
- 230 V = 6.3 AT

Pump unit
- 120 V = 3.15 AT
- 230 V = 3.15 AT

Troubleshooting

Problem	Probable cause(s)	Suggested remedy
System will not produce fog/haze when control panel set to **RUN** or remote control Fog/Haze switch turned on	System not at operating temperature	Wait until HEAT message no longer shown
	FOG or HAZE set to 0	Increase setting
	TRUN set to 0	Increase setting
	DMX signal present	Disconnect or turn off DMX controller
System can be fired from control panel or remote control, but not by DMX controller	DMX address setting incorrect	Change DMX address (page 18)
	Poor connection in DMX line	Check DMX cables and connections
	LINK menu is set to SEND	Set LINK menu to RECV
All fog/haze outputs are weak	Base pump unit requires priming	Prime base pump unit (page 18)
Fog/haze output is weak on one particular head	Channel requires priming	Prime the channel (page 18)
Wet, greasy, non-uniform fog output, fluid drips or spits from nozzle, or very loud noise when firing system	Incompatible effect fluid	Use approved fluid!
System appears dead	Mains fuse blown	Replace fuse (page 25)
	No power at AC cable inlet	Check power cable and circuit breaker
System causes DMX errors to occur on other units when connected to a DMX system	LINK menu is set to SEND	Set LINK menu to RECV

Status messages

message	reason
OFF	The heaters are Off, the unit is shut down.
HEAT	The unit is heating up to operating temperature.
RDY	The heater is at operating temperature, but Fog is not turned on (RUN set to STBY or FOG set to 0%).
DMX	The heater is at operating temperature and the unit is under DMX control.
RN 13	The system is in Timer mode and is in a RUN period (the number counts down to show the run time)
OF 15	The system is in Timer mode and is in an OFF period (the number counts down to show the off time)
FLU ERR	Run out of fluid. Refill the fluid treservoir and operate the base prime function (bottom right hand button on control display)
CAL ERR	The system has detected an error with its calibration settings and will not operate. Call Martin Service.
TEMP ERR	The system has detected an error in the temperature sensor and will not operate. Call Martin Service.

Resetting the system after fluid out

If the system runs out of fluid simply refill the fluid reservoir and follow the priming instructions on page 18.

Technical Specifications

Physical

Fog head

Length ..... 356 mm (14 in.)
Width ..... 259 mm (10.1 in.)
Height ..... 169mm (6.7 in.)
Height with hanging bracket ..... 278 mm (11 in.)
Weight ..... 7.6 kg (16.8 lb.)

Haze head

Length ..... 395 mm (15.6 in.)
Width ..... 259 mm (10.2 in.)
Height ..... 209mm (8.3 in.)
Height with hanging bracket ..... 318 mm (12.6 in.)
Weight ..... 8.9 kg (19.6 lb.)

Pump unit

Length ..... 415 mm (16.4 in.)
Depth ..... 257 mm (10.2 in.)
Height ..... 431 mm (17 in.)
Weight, dry ..... 13.4 kg (29.5 lb.)
Weight, filled ..... 23.4 kg (51.5 lb.)

Performance

Coverage volume per fog head ..... 550 m^3 (19, 423 ft^3) per minute
Coverage volume per haze head ..... 2000 m^3 (70,629 ft^3) per minute
Continuous effect output
Fluid usage ..... Application specific
Ready time 7-minutes

Control and programming

Control options ..... Digital control panel, DMX, optional digital remote control, master/client link mode
Control parameters ..... Continuous or timer-controlled output
Control zones ..... 3 zones, 2 matching heads per zone
Zone control ..... Independently controlled, automatic head detection
Fog heads ..... Variable outpour per zone, 0-100%
Haze heads variable output per zone, haze/fan proportionally controlled, 0-100%
DMX channels ..... 4 channels (Zone 1,2,3,control)
DMX compliance ..... ANSI E1.11 - USITT DMX512-A

Construction

Fog Head

Housing ..... Steel and aluminum
Color ..... Black
Heat exchanger ..... EU-1150 W, US-1000 W, direct thermal protection
Hanging bracket ..... Integrated yoke w/safety attachment point

Haze Head

Housing ..... Steel and aluminum
Color ..... Black
Heat exchanger ..... 900 W, direct thermal protection
Integrated axial fan ..... RPM proportionally regulated to haze output
Hanging bracket ..... Integrated yoke w/safety attachment point

Pump Unit
Housing ..... Steel and aluminum
Color ..... Black
Fluid pump .....3 oscillating piston, high pressure
Fluid system .....10 l concealed and removable reservoir
Optional external fluid connection kit (top and bottom inlet)
Fluid Management .....Fluid out sensing

Installation

Fog and Haze Heads
Mounting .....Floor or hanging
Orientation.....Any
Maintain 100 mm (4 in.) clearance around and 600 mm (23.6 in.) in front of head

Pump Unit
Mounting ..... Standing or wall-mountable
Orientation..... Horizontal only
Maintain 150 mm (5.9 in.) clearance around and 300 mm (11.8 in.) above

Fluid System
Fluid tubing.....6 mm OD silicon tubing
Maximum distance from pump unit to fog heads ..... 50 m (164 ft.) *
Maximum distance from pump unit to haze heads ..... 10 m (32.8 ft.) *
Maximum head height difference between pump units and heads ..10 m (32.8 ft.)
Data connection to heads .....Cat5e terminated with RJ45, pin to pin

**Maximum distance to last head in daisy chain*

Connections

Fog & Haze Heads
AC Power ..... Hardwired with stripped ends
Data in/out.....RJ45
Fluid inlet..... push-to-connect tubing inlet, 6 mm

Pump Unit
AC Power .....IEC Male inlet, C14
DMX in/out ..... 3- and 5-pin locking XLR
Remote control.....3-pin locking XLR
Data link to heads 3x RJ45
Fluid Outlet.....3x push-to-connect tubing outlet, valved, 6 mm
Firmware ..... AVR socket

Electrical

EU Models

Fog Head
AC power ..... 220-240 V, 50/60 Hz, 1150 W
Main fuse.....6.3 AT (slow-blow), 250 V
Typical power and current.....1150 W, 5.1 A*

Haze Head
AC Power ..... 220-240 V, 50/60 Hz, 900 W
Main fuse.....6.3 AT (slow-blow), 250 V
Typical power and current.....900 W, 4 A*

Pump Unit
AC Power ..... 220-240 V, 50/60 Hz, 180 W
Main fuse.....3.15 AT (slow-blow), 250 V
Typical power and current.....180 W, 0.9 A*

US Models

Fog Head
AC power ..... 100-130 V, 50/60 Hz, 1000 W
Main fuse.....10 AT (slow-blow), 125 V
Typical power and current.....1000 W, 8.6 A*

Haze Head
AC Power ..... 100-130 V, 50/60 Hz, 900 W
Main fuse.....10 AT (slow-blow), 125 V
Typical power and current.....900 W, 7.6 A*

Pump Unit
AC Power ..... 100-130 V, 50/60 Hz, 180 W
Main fuse.....3.15 AT (slow-blow), 125 V
Typical power and current.....180 W, 1.7 A*

**Measurements made at nominal voltage. Allow for a deviation of +/-10%*

Thermal

Minimum ambient temperature (Ta min)..... 5° C (41° F)
Maximum ambient temperature (Ta max)..... 40° C (104° F)
Exterior surface temperature, steady state, at 20°C ambient..... 30° C (86° F)
Maximum nozzle temperature..... 290° C (554° F)

Approvals

EU Models
EU safety:..... EN 60335-1+A15, EN 62233
EU EMC: ..... EN 61000-6-3
EU Immunity:..... EN 61000-6-1
Australia/NZ (pending) ..... RCM

US Models
US safety (pending) .....UL 998
Canada safety (pending).....CSA C22.2 No 104.01

CE

Included items:

Pump unit
Fluid reservoir, 10 l..... P/N 34300520
Power input cable, EU, IEC C13 female, stripped ends, 1.5 m (4.9 ft.).....P/N 11501012
Power input cable, US, IEC C13 female, molded NEMA 5-15P, 3 m (9.8 ft.) ...P/N 11501502

Fog and Haze Heads
Fluid tubing, 10 m (32.8 ft.), 6 mm OD..... P/N 62520020
Push-in T connector, fluid tubing, 6 mm OD..... P/N 26460065
Data cable, Cat 5e with RJ45, 10 m (32.8 ft.).....P/N 1184011

Accessories

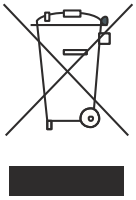
RUSH Club Smoke Dual, Digital Remote Control ..... P/N 92765043
RUSH Club Smoke Dual, External Fluid Kit..... P/N 92620030
Ducting Kit, 5 m (16.4 ft.) for fog heads ..... P/N 92625005
Approved Fluids*
RUSH Club Smoke Dual Fluid
Martin Pro-Clean and Storage Fluid
Approved Discontinued Fluids*
Martin Pro Clean Supreme
Installation Accessories
Fluid tubing coupler, 6 mm OD ..... P/N 26460360
Fluid tubing, 30 m (98.4 ft.), 6 mm OD..... P/N 62520091
Fluid tubing, 50 m (164.1 ft.), 6 mm OD..... P/N 62520092
Quick release fluid tubing connector, 2 x 6 mm OD, male/female valved .....P/N 92620007
Half-coupler clamp ..... P/N 91602005
G-clamp (vertical hanging suspension only) ..... P/N 91602003
Quick trigger clamp (vertical hanging suspension only) ..... P/N 91602007
Safety cable, SWL 60 kg (132 lb.), BGV C1/ DGUV 17, black ..... P/N 91604006
Service Tools
Epsilon 5 AVR programmer ..... P/N 50502004
Temperature calibration box ..... P/N 92620005

**Various sizes available - contact your dealer or see 'Fluids' product pages for details*

Ordering information

RUSH Club Smoke Dual, Pump Unit, EU ..... P/N 92250130
RUSH Club Smoke Dual, Pump Unit, US ..... P/N 92250140
RUSH Club Smoke Dual, Fog Head EU ..... P/N 92250150
RUSH Club Smoke Dual, Fog Head, US ..... P/N 92250160
RUSH Club Smoke Dual, Haze Head, EU ..... P/N 92250170
RUSH Club Smoke Dual, Haze Head, US ..... P/N 92250180

Specifications subject to change without notice. For the latest product specifications, see www.martin.com



Disposing of this product

Martin™ products are supplied in compliance with Directive 2002/96/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), as amended by Directive 2003/108/EC, where applicable.

Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of Martin products.



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