PFX900H Instruction Manual

PERFORM

Stage Mist 900

CAUTION - ATTENTION - VORSICHT

RISK OF ELECTRIC SHOCK- DO NOT OPEN
RISQUE D'ELECTROCUTION- NE PAS OUVRIR
STROMSCHLAGGEFAHR- NICHT OFFNEN

In Compliance with the following directives: RoHS Directive (2002/95/EU) and WEEE Directive (2002/96/EU)
If this product is no longer functional or reaches the end of its usable life, please take it to an approved recycling plant.

RoHS

UK CA

Version 1.0

www.terralec.co.uk

Dear Customer,

Thank you for purchasing the PERFORM FX PFX900H Stage Mist 900. With decades of experience in design and production, PERFORM FX is one of the leading manufacturers of Professional Lighting and Effects equipment. This unit has been designed and manufactured to the highest standards so you can be assured you have made a good investment.

For your safety and to ensure you make full use of the Stage Mist 900 features, please make sure you read this manual in full.

Safety Advice:

- Read this manual in full before operating this product.
- Keep this manual in a safe place for future reference.
- Heed all warnings and instructions, both in this manual and on the product.
- Carry and transport this product with care. Dropping this product may result in serious mechanical failure.
- The manufacturer accepts no responsibility for injury or damage caused as a result of not following the manual provided.
- Turn off and unplug this machine from mains supply when not in use.
- This machine is not waterproof and should not be used outside.
- In the event of any liquid entering the housing, unplug immediately and contact a qualified engineer.

Protection from Electric Shock:

- Only connect this unit to a mains socket with suitable trip and RCD protection.
- To disconnect from the mains socket, always remove by the mains plug. Do not attempt to remove by pulling the mains cable.
- Disconnect the unit from the mains supply before cleaning. Cleaning should be carried out with a soft, dry cloth.
- Do not expose this unit to any liquids.
- Do not operate near exposed water or in high humidity.
- Choose a suitable route for mains cables, ensuring trip hazards are avoided and the mains cable is not at risk of being crushed.
- Do not open this unit to service. There are no user serviceable parts inside. Any servicing or repairs should be carried out by a qualified engineer only. Any attempt to service or adapt this unit will leave your warranty void and could result in serious malfunction or injury.

Protection from Fire:

- Do not place near sources of heat or ignition.
- Do not cover or block any ventilation holes.
- Check your AC wall socket will take the power you are applying to avoid overloading the mains supply.

Protection from Injury and Damage:

- Do not attempt to modify this unit.
- Always install the unit in a suitable location where vibrations to the unit are avoided.
- Check this unit matches the mains voltage and frequency before plugging it in to your mains socket.
- In the event that any object or liquid enters the machine, switch off immediately, remove from the mains and consult a qualified engineer.
- Should you experience any malfunction or damage to the mains cable, disconnect from the mains supply immediately and consult a qualified engineer.
- All parts should be replaced with genuine spare parts and carried out by a qualified engineer.

Danger of Burns:

- For operation by adults only. This unit must be installed out of reach of children.
- Never leave the machine running unattended.
- Never aim the nozzle directly at people.
- The machine nozzle becomes very hot. Avoid coming within 60cm of the output nozzle during operation.
- Ensure your machine nozzle has completely cooled before handling.
- Locate this unit in a well-ventilated area. Do not cover the machine vents. In order to guarantee adequate ventilation, allow a free air space of at least 20cm around all sides of the machine.

Safety & Protecting Your Machine:

- Do not add liquids of any kind, especially flammable liquids, to this machine or its intended fluid. Use only water based fluid, specifically designed for effects machines.
- Use high quality water-based liquid, recommended by your dealer to reduce clogging.
- During operation, ensure there is sufficient fluid in the tank. Operating without fluid will damage the pump.
- If your machine fails to work, disconnect immediately, remove all liquid and return in original packaging to your dealer.
- Always drain the tank before transporting.
- Do not drink fog, haze, snow or bubble liquid and avoid contact with the skin and eyes. If ingested call a doctor immediately. In the event of fluid coming into contact with your skin, rinse thoroughly with warm water.

Contents & Unpacking:

Before beginning your initial setup, check the unit has not been damaged in transit. In the event there is damage to the housing, cable or internal components, contact your dealer immediately.

Specifications:

A 900 Watt water-based haze machine, with wireless remote and DMX controllability.
Code: PFX900H
Mains Supply: 230Vac 50Hz
Power: 900 Watts
Heat Up Time: 3-4 mins
Dimensions: 272 x 250 x 340mm (Including Bracket)
Weight: 6.1kg

Features Include:

- A 900 Watt Heater
- 1L Fluid Tank
- Uses water-based haze fluid
- Self- cleaning function
- DMX controllability, 3 channels of control
- Adjustable fan speed

Product Information:

	Name	Use
1	Hanging Bracket	Used to hang the haze machine on truss.
2	Eye Bolt	Used to offer secondary safety support for wires.
3	Fluid Bottle	Fill this bottle with water-based haze fluid.
4	Adjustable Output Flap	Used to adjust the haze direction.
5	Display & Menu Buttons	Used to operate the haze machine.

Product Information:

	Name	Use
6	Fan	Helps dispurse the haze.
7	DMX Input/ Output Socket	Connection to a DMX controller.
8	Power Switch	Used to switch the haze machine on and off.
9	IEC Input	Supplies mains to the unit.

First Time Operation:

1. Make sure the fluid tank has been filled with water-based haze fluid.
2. Plug the mains lead into the IEC socket on the back.
3. Plug the mains plug into a suitable 240V AC mains supply.
4. Turn on the power switch.
5. The menu display will count down to 0000. This takes 3-4 minutes.

When '0000' is displayed, the unit will then display 'A001'. This means the haze machine is ready to use.

Menu Layout:

DMX	A001	A512	Adjust to set DMX address
Volume	1.000	1.100	Adjust to set output volume
Fan	2. 01	2. 10	Adjust to set fan speed
Timer	3.0.01	3.1.80	Adjust to set duration
	3.00.1	3.18.0	Adjust to set interval
No Function	4. ON	4.OFF	
Wireless No.	5. 00	5. 04	Select to set wireless remote button settings

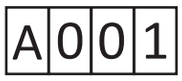
Remote

5. 00	5. 01	5. 02	5. 03	5. 04
A- On B- Off C- On D- Off	A- On and Off	B- On and Off	C- On and Off	D- On and Off

Set DMX Address:

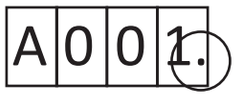
Channel	Volume	Function
1	0-127	Off
	128-255	On
2	0-255	Haze Volume
3	0-255	Fan Speed

DMX Mode:

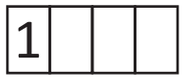
1. Use the menu button to select 

2. Use the 'Up' and 'Down' buttons to set a DMX address. Once set, hold down the 'Enter' button for 3 seconds.

3. Connect a suitable DMX controller. If a DMX signal is being received, a small light will flash in the menu.



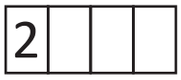
Volume Output Control/ Manual Mode:

1. Use the menu buttons to select 

in the menu.
2. Adjust using the 'Up' and 'Down' buttons.
3. Press the 'Enter' button to manually output haze at the set volume.
4. Press 'Enter' button again to stop the haze output.

Note:
This function sets the volume for timer mode, manual mode and wireless mode. This does not set the volume for DMX mode.

Fan Speed:

1. Use the menu buttons to select 

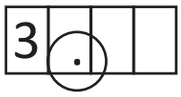
in the menu.
2. Use the 'Up' and 'Down' buttons to select the fan speed.

Note:
This function sets the fan speed for timer mode, manual mode and wireless mode. This does not set the fan speed for DMX mode.

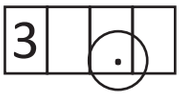
Timer Mode:

1. Set Volume Output and Fan Speed as above.
2. Use the menu button to select 

. Press 'Enter'.



This dot is displayed when you are adjusting duration.



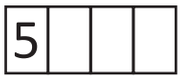
This dot is displayed when you are adjusting interval time.

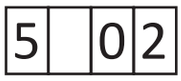
3. Ensure you have chosen the correct timer mode (as shown above)- Adjust using the 'Up' and 'Down' buttons.
4. Press 'Enter' to start timer mode. Press 'Enter' again to stop timer mode.

Using the Wireless Remote:

1. Set Volume Output and Fan Speed as above.
Ensure a suitable battery has been installed the correct way round in the remote.

2. Use A/C buttons to activate haze output and B/D buttons to stop haze output.
Users can adjust settings in the menu, so the remote will only work off of an individual button, i.e. only button 'B' activates and deactivates the haze machine. ***(see 'Menu Layout' diagram).***

3. Press menu button until  is displayed.

4. Use the 'Up' and 'Down' buttons to adjust so the menu says 

5. Now the wireless remote only works when button 'B' is pressed.

Note:
Remote does not work in DMX mode.

Maintenance:

Do not allow liquid to become contaminated. Always replace the cap on the liquid container immediately after filling. After every 40 hours of operation, or if the unit is not to be used for one month, it is recommended to run a cleaning solution (20% clear vinegar and 80% distilled water) through the system to prevent clogging in the heater. This should be carried out in a well-ventilated room. Snow machines do not need vinegar, just 100% distilled water.

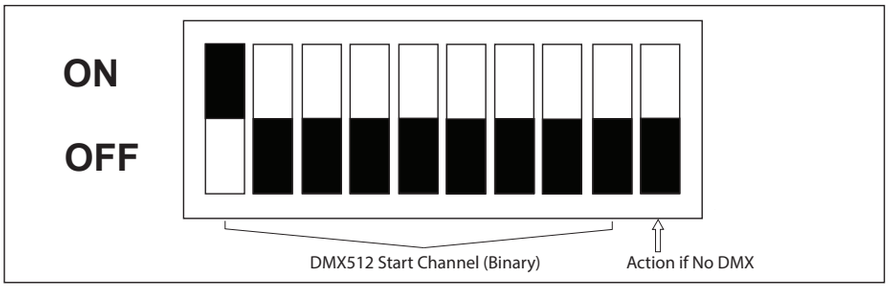
DMX Basics:

DMX is short for "digital multiplexer", which is a universal protocol designed for the entertainment industry. It allows control of intelligent fixtures like scanners, moving heads, LED par cans, dimmer packs and effects machines etc. DMX allows you to control many fixture channels, normally up to 512, with varying channels from 0-255 (0-100%). This will give control of channels such as gobo selection, movement, colours, dimming and timing to name just a few.

DMX is a very good system, as all this information can be sent down one cable. Used in conjunction with a DMX controller with memory, all your channel settings can be saved and recalled easily.

DMX was designed so that all manufacturers can use the same protocol/ language to control their fixtures, allowing the end user to use any make fixture from their DMX controller, as long as both are DMX compatible, and the controller has enough channels to control the fixture that is attached. Fixtures have an input and output DMX socket, allowing you to connect from the controller to the first fixture then from that fixture to the next (this is often referred to as 'daisy chaining').
Sockets are normally 3 pin XLR but can be 5 pin XLR.

DMX fixtures need to have a DMX address set, this is so they can then decode the correct information from the controller. This is normally done by a digital display panel, where the address can be changed by simple up and down buttons; the system address ranges from 1-512. Alternatively, it may be controlled by a row of small switches, called dip switches; on this type of system, the required address is then converted to a binary number.

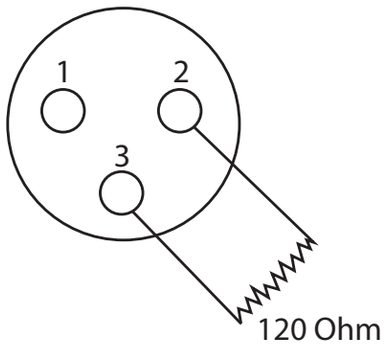


To work out your dip switch settings you can simply download a DMX calculator from the internet. The order in which fixtures are connected in a DMX line does not influence the DMX address, a fixture set to DMX address 1 can be put in a DMX line anywhere from beginning, middle to end. As long as it has its address set to 1, it knows to take information from that point onward.

3 Pin	**5 Pin**
Pin 1 GND	Pin 1 GND
Pin 2 -	Pin 2 -
Pin 3 +	Pin 3 +
	Pin 4 Not Used
	Pin 5 Not Used

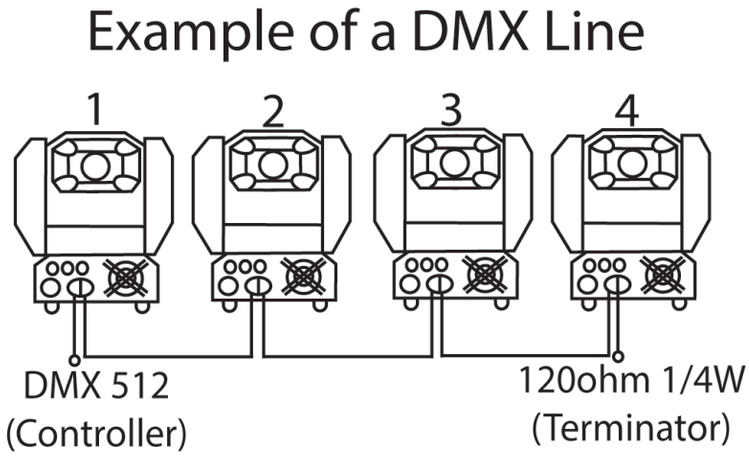
DMX Wiring and Connections:

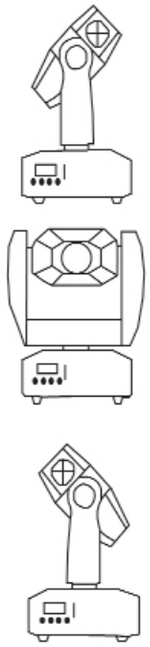
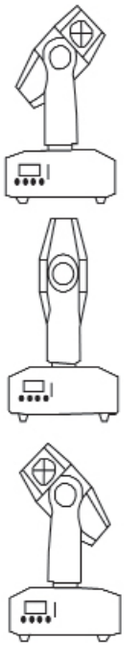
3 pin DMX wiring is more common, although using a 5 pin connector is better to stop confusion with audio leads. With 5 pin connections, not all pins are used, though it is worth checking your manual for your fixture, as some lights use the unused pins for low voltage control. To avoid erratic behaviour from your fixture, ensure when making cables, you always use suitable DMX cables and do not connect pin 1 GND to the outer casing of the connector (as you may do with your audio cables). Do not make "Y" leads to split cable fixtures; always use the in and out sockets or a DMX splitter.



We also recommend you put a DMX terminator in any fixture which does not have a DMX lead connected from the output socket to another fixture; to reduce unexpected behaviour. A DMX terminator is simply a male XLR plug with 120 Ohms, ¼ watt resistor, soldered across pins 2 and 3.
You can also buy these pre-made.

Example of a DMX Fixture with 5 Channels:



Ch1	Ch2	Ch3	Ch4	Colour	
Pan	Tilt	Shutter/Shaking	Gobo	Normal	Split
540°	270°	246-255 Open	255 Fastest speed Gobo change	255 Fastest speed Rainbow Effect	255 Fastest speed Rainbow Effect
		247 Fastest speed shaking	 128 Slowest speed Gobo change	 128 Slowest speed Rainbow effect	 128 Slowest speed Rainbow effect
			120-127 	118-127 Pink	121-127 Pink
			111-119 	107-117 Yellow	113-120 Yellow+Pink
			103-110 	096-106 Orange	106-112 Yellow
			094-102	086-095 Light Green	098-105 Orange+Yellow
			086-083 	075-085 UV Purple	091-097 Orange
			077-085 	064-074 Blue	083-090 Light Green+Orange
			069-076 	054-063 Red	076-082 Light Green
		132 Slowest speed shaking	060-068 	043-053 Amber	068-075 UV Purple
			052-059 	032-042 Light Blue	061-067 Blue
		131 Fastest speed shutter	044-051 	022-031 Magenta	053-060 Red+Blue
			035-043 	011-021 Green	046-052 Red
			0-26-034 	000-010 White	038-045 Amber
			018-025 		031-037 Light Blue
			009-017 		023-030 Magenta
			000-008 		016-022 Green+Magenta
					008-016 Green
		16 Slowest speed shutter			000-007 White
		008-015 Open			
		000-007 Blackout			
0°	0°				

Each lighting fixture takes up 5 DMX Channels, **your PFX900H takes three channels, so just step on three channels for this machine.**
You have a cable from the controller to the first fixture cable, then from first to second and so on. The last light then has a DMX terminator plugged in.

Fixture 1 would be set to DMX address: 1 dispswitch number 1 on

Fixture 2 would be set to DMX address: 6 dipswitch number 2 &3 on

Fixture 3 would be set to DMX address: 11 dipswitch numbers 1, 2 & 4 on

Figure 4 would be set to DMX address: 16 dipswitch number 5 on.

You can include your fog machine anywhere on this chain.
We recommend you read manuals for your DMX fixture and controller in full. Some controllers tell you what each fixture needs to be, and some lights need other settings changed before they will work.

When setting your DMX address, you must ensure fixtures do not overlap from one to the next.

You can set 2 fixtures to the same address, as long as they are the same fixture (i.e. same channel layout), then they will do the same as each other.

Thank you for taking the time to read this information.
For further information, please contact sales@terralec.com or visit www.terralec.co.uk