Jem ZR12 DMX Specifications

Heater size 1000w	Total power consumption
2 1000w	4.8A @ 220-240v 9.5A@ 110v
Fuse rating	Heat up time
5A @ 220-240v 10A @ 110v	a 7 mins
Operation time	Over-heat protection
a Continuous	Direct Thermal Protection Device
Controller supplied	Control Options
DMX interface with fog button	 Jem Multifunctional remote control 0-10v input
DMX input	0-10v input
³ 1 channel required for variable output	Use remote Din socket Pin 2 GND and Pin 5, 0-10v input. This pin needs 1.5v to heat the machine and 2-10v to run the pump when up to working temperature.
Analog link	Fluid capacity
Standard via 5 pin DIN socket	2.5 litre
Recommended fluid	Fluid consumption (max.)
🔉 Pro Smoke Studio (DX Mix)	a 75ml/min
Pro Smoke Super (ZR Mix)	5 0.018 Imp. gallon/min
Pro Smoke Super (Fragranced) Pro Smoke High Density (SP Mix)	
Fluid level sensing	Input fluid pipe diameter
"N/A	₅ O/D 4mm
Smoke Output (max.)	Dimensions of Machine
500 cubic metres/min 17657 cubic feet/min	500mm x 225mm x 165mm
Dimensions when boxed	Weight (no fluid)
670mm x 310mm x 300mm	a 11kg
Weight (with fluid)	Flying kit
3 13.5kg	, N/A
Drip tray	_
Optional	

The machine should be located in a well-ventilated area with a minimum of 200mm air space around the sides and top of the machine. The machine should only be used on level surfaces. The initial smoke output of the machine is hot, so the front of the machine should at least 1 metre from surfaces or people. Never leave the machine running unattended.Do not install above people's heads.

Ducting kit	Output nozzle size
Optional 4 " flexible inc. adapter	40mm dia.
Max length of remote cable 50 metres (5 metres supplied)	Accessories Jem Multifunctional remote control 4 " Flexible Ducting System inc. Adapter Drip tray

Sample project specification

Description

The ZR12-DMX includes all the same features as the ZR12-AL yet has added DMX input via a specially designed on-board interface for extra flexibility and control.

Soft Start Electronics

The "crack" created during the initial burst of smoke is caused by the pump pressure overcoming the incredible back pressure of the heat exchanger. Jem's unique Soft Start Electronics gradually powers the pump, eliminating this crack and ensuring a quieter and smoother operational level following initial start up.

Heat exchanger

All Jem heat exchangers are designed for high efficiency performance. Only the purest grade LM24 aluminum is used in the production process which eliminates the risk of porosity (pockets of gas within the casting which can cause heater failure). All heat exchangers contain cuprous helicoils of at least 2.8 meters in length, ensuring a continuous flow of pure, dry, white smoke.

Electronic Pump Ramping

Jem was the original pioneer of EPR, an intelligent means of warning of a drop in temperature which could result in 'wet smoke' (residue). The pumps respond to this signal by running slower and pumping less fluid, thus allowing the heaters to restore optimum operational temperature. This guarantees a continuous flow of smoke using highly efficient, lower wattage heaters.

DMX Control

This uses a single channel of DMX 512 giving a full variable output from the machine. This important feature means that atmospheric effects can now become choreographed into the Light show or stage performance via the lighting console.

On-Board Remote System

Greatly appreciated by rental companies, this hand-held remote can be stored during transit on-board the machine, making it easy to find at show time and eliminating transit vulnerability. But storage isn't the only advantage. Portability is greatly enhanced by having on board controls.

Direct Thermal Protection Device

This small yet crucial component is the last line of defense against catastrophic failure. Other manufacturers still depend on cheap plastic whereas Jem's DTPD is made from a solid ceramic composite. This guarantees extremely precise overheat monitoring and is unaffected by ambient temperature changes.

Max Power Consumption

4.8A @ 220v

9.5A @ 110v

👼 Maximum Smoke Output

- 500 cubic metres/min
- 17657 cubic feet/min

Fluid container

All Jem smoke, haze and heavy fog machines are designed to carry removable fluid containers of varying sizes depending on the models application. The removable container makes for quicker refills and protects the machine from damage through spillage in transit.

Maximum Fluid Consumption 75ml/min

- 0.018 Imp. gallon/min
- **Accessories**
- Ducting system (accepts the standard ZR ducting system)
- DMX interface (accepts the ZR12 DMX interface)
- Drip tray

Included items

- Jem Multifunctional remote control
- 2.5 litre fluid container (empty)
- Instructions for use manual
- Recommended fluids
- Pro Smoke Studio (DX Mix)
- Pro Smoke Super (ZR Mix)
- Pro Smoke Super (Fragranced)
- Pro Smoke High Density (SP Mix)