

## Jem ZR12 AL Specifications

---

### Heater size

- ☞ 1000w

---

### Total power consumption

- ☞ 4.8A @ 220-240v
- ☞ 9.5A @ 110v

---

### Fuse rating

- ☞ 5A @ 220-240v
- ☞ 10A @ 110v

---

### Heat up time

- ☞ 7 mins

---

### Operation time

- ☞ Continuous

---

### Over-heat protection

- ☞ Direct Thermal Protection Device

---

### Controller supplied

- ☞ Jem Multifunctional remote control

---

### Control Options

- ☞ DMX interface
- ☞ 0-10v input

---

### DMX input

- ☞ Via ZR12 DMX interface

---

### 0-10v input

- ☞ 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

- ☞ Standard via 5 pin DIN socket

---

### Fluid capacity

- ☞ 2.5 litre

---

### Recommended fluid

- ☞ Pro Smoke Studio (DX Mix)
- ☞ Pro Smoke Super (ZR Mix)
- ☞ Pro Smoke Super (Fragranced)
- ☞ Pro Smoke High Density (SP Mix)

---

### Fluid consumption (max.)

- ☞ 75ml/min
- ☞ 0.018 Imp. gallon/min

---

### Fluid level sensing

- ☞ N/A

---

### Input fluid pipe diameter

- ☞ O/D 4mm

---

### Smoke Output (max.)

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

---

### Dimensions of Machine

- ☞ 500mm x 225mm x 165mm

---

### Dimensions when boxed

- ☞ 670mm x 310mm x 300mm

---

### Weight (no fluid)

- ☞ 11kg

---

### Weight (with fluid)

- ☞ 13.5kg

---

### Flying kit

- ☞ N/A

---

### Drip tray

- ☞ Optional

---

### Installation

- ☞ 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 be at least 1 metre from surfaces or people. Never leave the machine running unattended. Do not install above people's heads.

---

#### Ducting kit

- ☞ Optional 4 " flexible inc. adapter

---

#### Output nozzle size

- ☞ 40mm dia.

---

#### Max length of remote cable

- ☞ 50 metres (5 metres supplied)

---

#### Accessories

- ☞ 4 " Flexible Ducting System inc. Adapter
- ☞ DMX interface
- ☞ Drip tray

---

### Sample project specification

#### ☞ **Description**

This mid-sized portable smoke machine with enhanced output provides a continuous flow of dry, dense smoke controlled via Jem's multifunctional on-board remote.

#### ☞ **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.

#### ☞ **Analogue Link**

Whether you've run out of DMX channels or simply want to link two smoke machines together and operate them from a single remote, Jem's analogue link facility is the solution. This feature even allows multi-machine connection, making operation a simple one-finger action.

#### ☞ **Jem Multifunctional Remote**

This reliable remote offers more than the usual auto timer and smoke level output controls. Easily engaged, the timer gives complete adjustment for both 'Fog On' and 'Fog Delay' modes. These timer functions can be expanded even further by engaging Jem's unique '8X Mode' which multiplies the selected timer setting by eight.

#### ☞ **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**

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)