



**Jem**

A Martin Professional Product

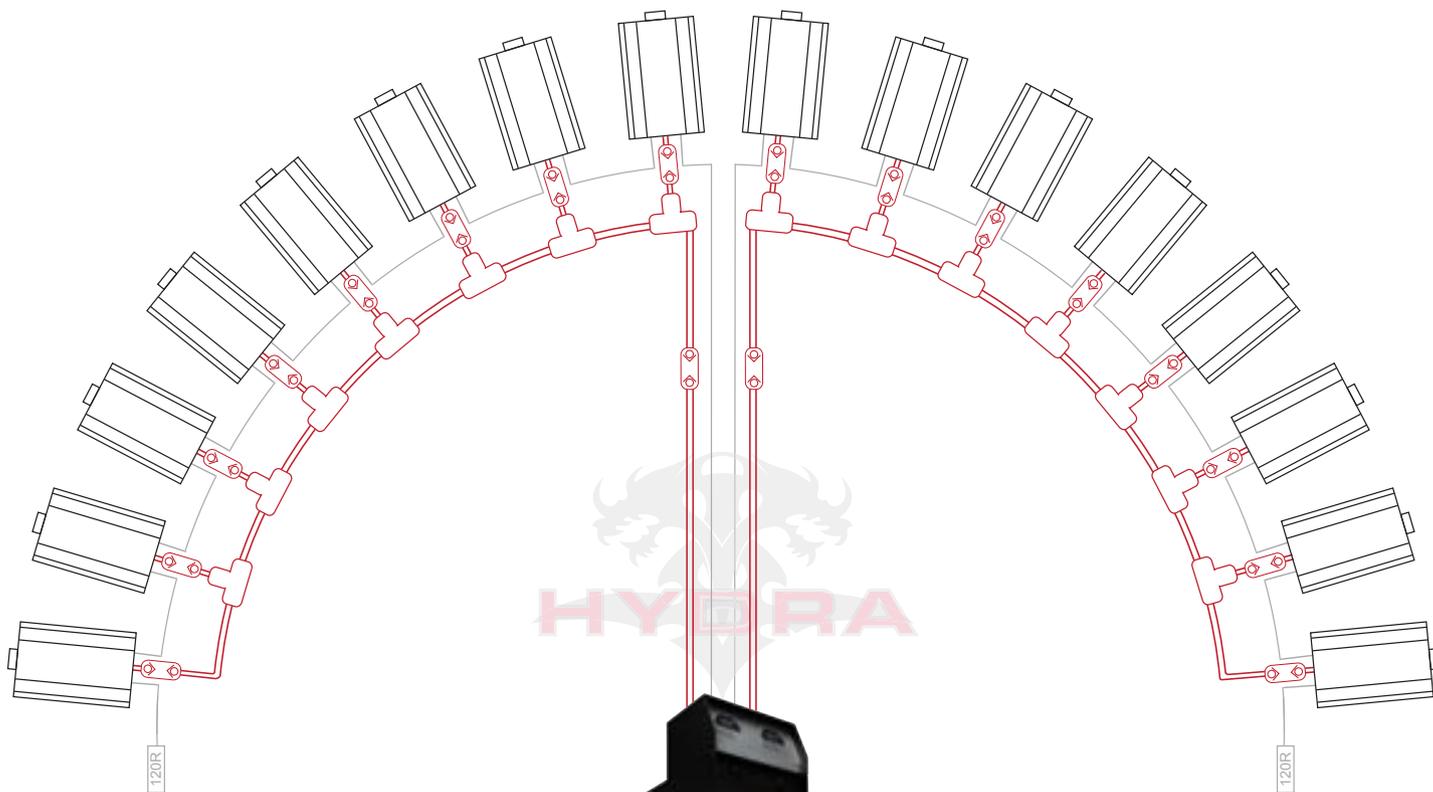
## Hydra is truly the new dimension in fog

The 16 heads of the Hydra can be individually synchronized into waves of varied outputs and effects. Each head independently provides the most dynamic and accurate output for exactly what is required for that moment in space and time.

Imagine an individually customized burst of fog at 16 crucial points on your truss or stage giving your lights just the right effect at just the right moment!



The Hydra's centralized base is the heart of the new dimension in fog design. It is the backbone that enables you to use the system for creating waves of effect, or simply for placing fog in areas normally too difficult or impossible to reach. Being the "brain" behind the Hydra system, the base monitors the entire system and makes sure that each individual head is ready to fire at any time.



— Data  
 == Fluid



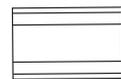
**Self seal connector**

Using the Hydra for touring applications these connectors enable you to transport the system with the fluid line primed. This allows for easy and fast set-up at the next location.



**T-connector**

Connects the individual Hydra heads to the main "pipeline".



**Hydra head**

Compact and sleek rugged design with full mounting flexibility.





## FLUID SYSTEM

### Base Unit:

Low pressure pump in Base Unit, maintains a constant 2.5 bar pressure in the fluid pipe supplying the heads, independent of the number of heads turned on.

Maximum head fluid consumption 120mL/minute (Pro Smoke Super).

The system is factory calibrated for 3 fluid types selected from base unit (plus cleaning fluid).

A new mode for cleaning fluid can be used.

Automatic leak detection will be implemented.

### Heads:

Standard pump (EP5), increases the 2.5 bar inlet pressure to 16 bar.

Solenoid valve ensures no fluid "puffs" out after firing, and avoids fluid running backwards, causing delays when firing next time.

Maximum installed height above base unit is 20m for a maximum fluid pipe run of 60m from the base unit (assumes 10mm o/d tube). Longer runs are possible if the height is reduced, up to a maximum of 120m.

With a central base unit, heads can be 240m apart at most (for 0m height above base unit).



## REMOTE CONTROL OPTIONS

### Base Unit:

DMX512 decoder:

Required channels = number of heads

Output is proportional for all levels above 12%

Channels supported = 1 to 511

Valid start codes = 0 (dimmer data only)

Full framing error detection implemented

2 x LED displays with 4 button keypad.

DMX settings, warnings, cleaning mode.

Use 2518 controller as remote for non-DMX installations, and make remote based on new M/F remote for limited control.

Both 3 and 5 pin DMX connections are provided.

### Heads:

Serial multi-drop RS485 data link, with 16 unit addresses and master slave protocol for command and status. NOT DMX Protocol.

The output of each head can be controlled individually and independently (1 DMX channel/head) via DMX input to the base unit.

## HEAT EXCHANGER

Wide bore steel vaporizing coil

DTP over-temperature protection

Electronic temperature control using thermocouple

Approximate time to reach operating temperature = 9 minutes (EU)  
12 minutes (US)

## ELECTRONICS SPECIFICATION

### Base Unit:

2 x Digi-PCB with display unit for DMX addressing and error reporting  
Power PCB for pump control etc.

### Heads:

Digi-PCB with power board.

Addressing via 16 way rotary (hex coded) switch

## POWER REQUIREMENTS

### Base Unit:

Input power (max):

0.25KW @ 230V

0.25KW @115V

50/60 Hz operation on either voltage

Current (max) EU 1.1A, US 2.2A

Power connection is via IEC connector

### Heads:

Input power (max):

1.5 KW EU @ 230V

1.2KW US @ 115V

50/60 Hz operation on either voltage

Current (max) EU 6.5A, US 10.4A

Power connection is hard wired.

## DIMENSIONS

### Base Unit:

Size: 664x510x939 (LxBxH)

Weight: 35Kg  
(including 2 x 25L drums [empty])

### Heads:

Size: 440x392x167 (LxBxH) with bracket horizontal

Weight: 13.8Kg