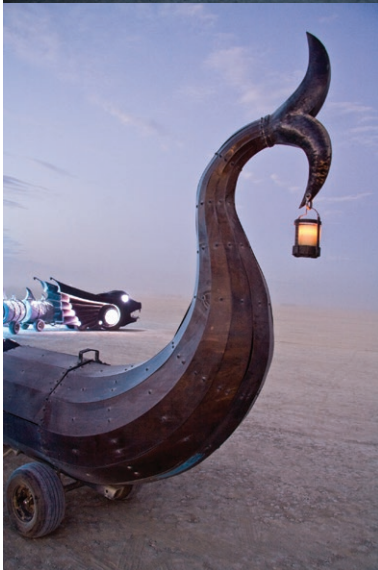


Empire of Dirt presents | www.serpenttwins.com

The Serpent Twins | Jormungand + Julunggul

Jon Sarriugarte + Kyrsten Mate | 2601 Adeline #133, Oakland, CA 94607, USA | +1 510 444 7007



The **Jormungand** (Midgard) and **Julunggul** (Rainbow) Serpents sit between two worlds; the old world that needed and revered them and the present which has shunned such monsters as fears metamorphosed into mythical form. Dark and with the power of fire, the Serpent Jormungand winds its way through the landscape of this world. Bright and with the light of the earth, the Julunggul serpent slithers to meet with her dark twin. They both have a function within mythology. The earth was shaped by Julunggul, who later swallowed it and all it contains in a fit of anger; then regurgitated it to restore the earth as it is full of music, art and life. The Serpents together bring forth all that is good in this world of music and art.

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Proposal

The 50 feet long **Serpent Twins** will roam the grounds in choreographed dances synchronized to our roars or music via Wi-Fi searching for stray souls to cull from the crowd and bring back to life. The Serpents are very nimble and quite easy to manage in very large crowds. The tail wheels track within 12in of front wheels in a 90° turn! The performers are in constant contact with one another using a combination of hand signals, radios and choreographed routines. Spotters on the back and walkers insure no one gets hurt. We would only perform when space and crowds permitted.

After performing on the move the Serpents will return to their garden den where the performance continues. Here the crowds are treated to mind-blowing light and sound shows. Midi controllers allow participant to play with the lights as the serpents roar and purr at the surrounding crowd.

Each Serpent has a huge display of LED lights the length of its body capable of creating rainbows, plasma fields, water drops, fire and video. This is made possible by an array of over 15,000 individually addressable LED's, a midi controller with sensors that when you touch the serpents head rainbow waves ripple through the entire body! Add to this a sound track of serpent calls designed at **Skywalker Sound** by **Kyrsten Mate** played on the 2000 watt sound system built into each head. These creatures are beautifully crafted and are just as impressive close up as they are rushing at you with their 50ft long bodies. Their presences and energy are huge and can easily create a 75ft plus circle of space sitting tip to tail anywhere they land. The lights and sounds draw people into this space making them an instant celebration of life.



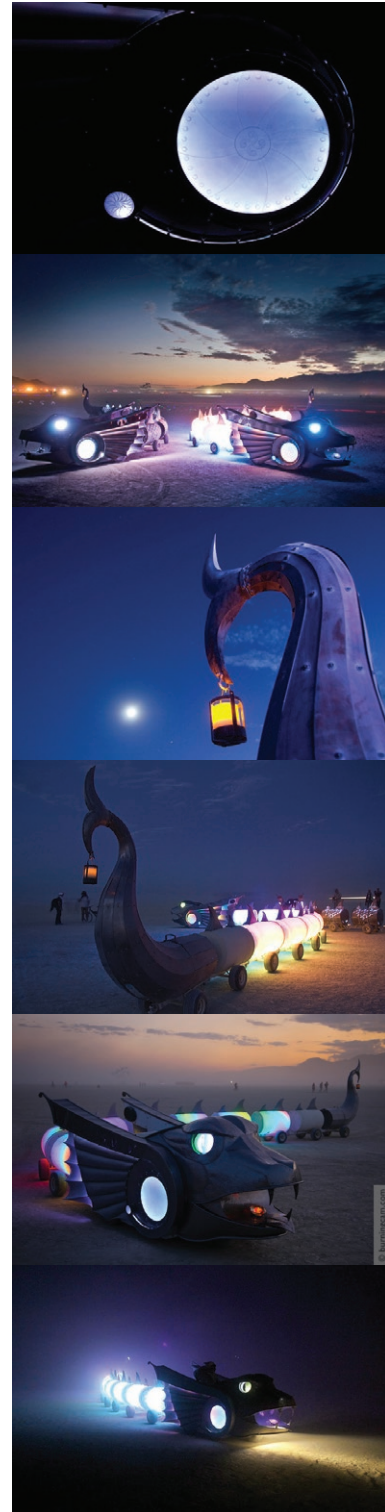
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Past Shows

2015-05	Maker Faire San Mateo
2015-01	Oakland Mayor Libby Schaaf Inauguration
2014-09	IDF14 Intel
2014-05	Maker Faire San Mateo
2013-09	Starlight Gala Chabot Space and Science Center
2013-12	Lucas Films Holiday Party
2013-08	Burning Man Honorarium
2013-05	Maker Faire San Mateo
2013-05	Google I/O
2013-05	Google X
2013-04	Exploratorium Gala
2013-04	California Academy of Sciences
2013-03	Exploratorium Parade
2012-08	Burning Man Honorarium
2012-05	Maker Faire San Mateo
2011-08	Burning Man Honorarium



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Performance

Speed	9 mph 4.4 km/h)
Range	20 miles 32 km)
Load Capacity	600 lbs 272 kg
Tow Capacity	2000 lbs 909 kg
Passengers	2

Dimensions

Weight	1200lbs 545kg (white head) 1300lbs 590kg (black head) 650lbs 295kg (white body) 825lbs 374kg (black body)
Length	50ft 15.24m
Width	48in 122cm
Height	41.5in 105.4cm
Outside Turning Radius	75in 190.5cm
Wheel Base	53.5in 135.9cm

Chassis

Frame Construction	Steel unitized body + Heavy duty 16 gauge diamond plate
Powertrain Type	Electric
Power	110v 50/60Hz (charger)
Transmission	Transaxle Assembly + Sealed Helical Gear Reduction

Drive

Controller	Series
Batteries	8x 217 amp/hr 6V (lead acid) Trojan T105Plus 1x 12V U-1
System Voltage	24V
Charger	Built-In 12A in head 25A with Honda 2000EU Generator in each tail
Brakes	Rear: Mechanical Drum Front: N/A Parking: Foot
Suspension	Rear: Coil springs Front: Coil springs
Steering	Manual + Tiller + Front Fork
Tires	Rear: 4.80 x 8 Pneumatic Front: 4.80 x 8 Load Range B, Pneumatic

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Instrumentation

Battery discharge indicator
Forward/reverse selector
Key switch
Electric horn
DC/DC Converter: 24V to 12V + 24V to 5V

Network

Ubiquiti Bullet M2-HP + Ubiquiti Bullet M5-HP
Network Switch

Lighting

Total Control Lighting
Beagle Board
Serpent Charmer custom network boards + PSOC by Cypress
Midi controller

Sound

Meyer Sound 4x MM-4XP
Pioneer Car Audio system with 18" sub, 2x 6", 2x 6x9
SONOS Connect with Tablet controls
NAS drive with sound library & Music

Documentation

EoD Serpent Twins – Diagram of Shipping Container Packing
T105Plus_Trojan_Data_Sheets
Forklift Propane Tanks

References

Jormungand Mythology
Julunggul Mythology

* Vehicle specifications subject to change without notice.