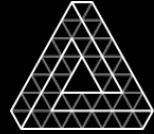


# The Penrose Triangle



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Burning Man 2013 Honorarium Recipient  
Exhibited at First Night 2014, Boston

The Penrose Triangle is a surprisingly pervasive cultural artifact. Perhaps the simplest way to create a three-dimensional illusion from a simple drawing of straight lines, it has been celebrated in the works of MC Escher, printed on postage stamps, and integrated into popular brands. Those of us who daydreamed during middle school may well have doodled it on the covers of our notebooks, as something in its simplicity confronts our innate ability to visualize shape, causing us to pause and better understand the boundary between what is an is not achievable.

This sculpture reproduces the Penrose triangle illusion as a 17' tall, curvilinear, illuminated structure that engages viewers to become active participants in the space they inhabit. The shape's symmetry encourages passers-by to stop and discover its secret, often passing on the secret to subsequent onlookers.

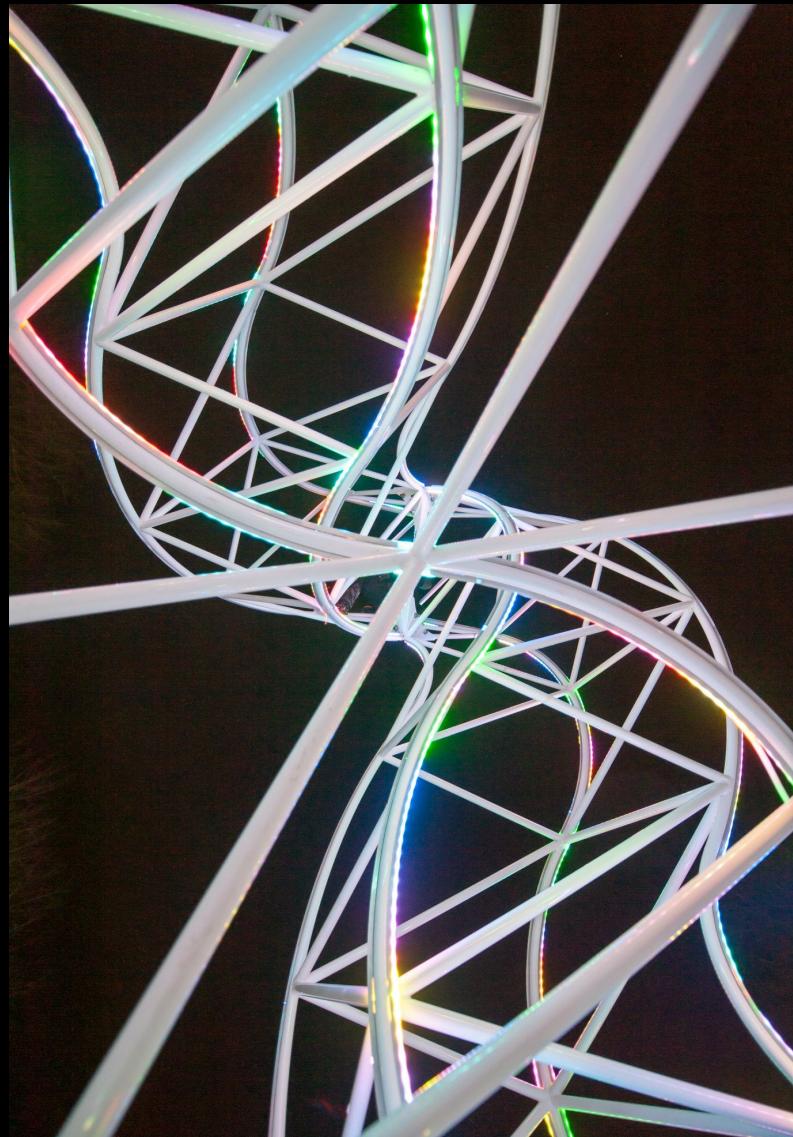
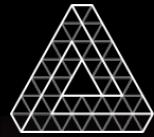
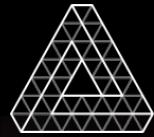


Photo: John Dill

# First Night 2014, Boston



# Burning Man 2013



Photo: Jim Urquhart/Reuters

# Technical Details

## Overall:

height: 17' 4" width: 19' 2" depth: 8' 6"  
powdercoated steel and channel lighting  
overall weight: 3000 lbs  
installs in a  $\varnothing 25'$  circle, typically in a day

## Structure:

3 cubes and 3 arms bolt together in three modules  
beams are 1.5", 0.08" and 0.12" wall structural steel  
designed to support 40 adults with safety factor of 10  
designed to withstand extreme weather and winds

## Lights:

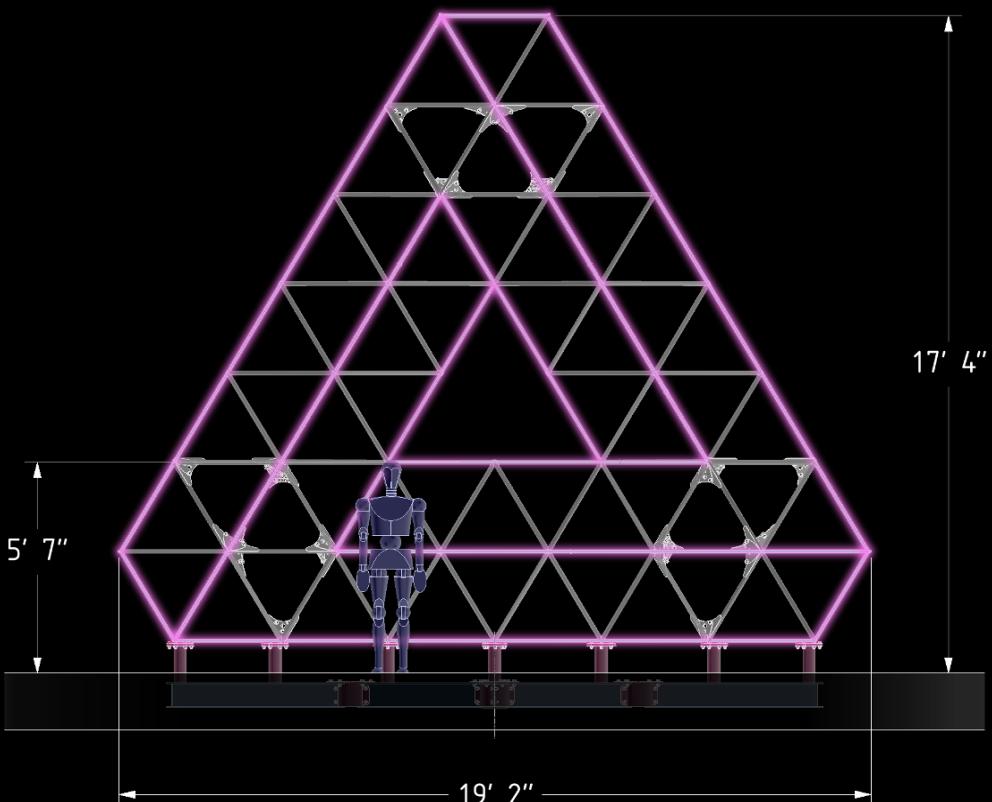
contains 2538 individually-addressable LEDs  
light show can be interactive or community-programmed  
48 bit HDR color for smooth transitions at low intensity  
each of the corner cubes embed control and power modules  
3 Teensy microcontrollers drive 8 channels each  
1 centrally controlled using Beaglebone microcontroller  
internet connectivity for interactive applications is possible

## Power:

24 VDC internal power and USB control  
typically draws 100-200 W, 600W peak  
powered by solar, battery, or grid

## Base:

suitable above or below ground placement  
8" I beam reclaimed from Big Dig (old Chinatown exit 22)



Visible beyond 4000'

Illusion effective from 50' radius

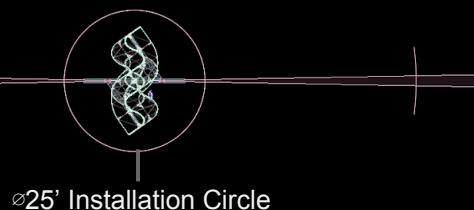




Photo: FlashDashBulb