Project CONDOR

Apple Computer: Running Max/MSP and the softVNS motion tracking external library. The images from the video cameras are sent to the softVNS motion tracking externals which locate and follow the LEDs on each of the heli-units. The information from both cameras is cross referenced to provide X,Y, and Z location information. The location data is then compared to the location specified in the choreography and the amount of trajectory correction is output. The audio is saved as an 8 channel audio file which is synchronized with the choreography in Max/MSP and output to the MOTU 828 audio interface.

MOTU 828

FM audio Transmitter | FM audio Transmitter
FM audio Transmitter | FM audio Transmitter
FM audio Transmitter | FM audio Transmitter
FM audio Transmitter | FM audio Transmitter

The 8 channel audio output is sent to the heli-unit speakers via the FM transmitters

PC Computer: Running the Keil Software Developers Kit. The trajectory correction information from the Apple computer is routed to the specified heli-unit controller.

Microcontroller

Multiplexer | Multiplexer | Multiplexer | Multiplexer
DAC | DAC | DAC | DAC
Heli-Unit Controller

x 8

Video Camera: for X and Z coordinate information

Audience

Performance Space (Gym)

Heli-Unit: Dragonflyer TI V x 8

FM audio reciever
Power source: 9v
amplifier

The Dragonflyer TI is already designed to lift a 4 ounce camera. The amplifier/ speaker/battery construction will weigh less than 4 ounces.

Video Camera: for X and Z coordinate information