Ptolemy _ 1990
a Video Monitor Matrix

"Ptolemy, borrows the cast of characters from the Machine vision series. The camera circles inside and outside a series of reflective spheres. The space, now condensed into small image/objects, begins its orbit around the center, the camera. The boundaries of the camera on an extended and orbiting arm delineates this world of circular movements, a dance of machine with ordinary objects in a mechanized choreography. The sound of motors and gears is piped through various processes adding to the surrealistic quality of this machine performance.

And there is more, the verticality is added through other mirrors and movement related sounds map the trajectory of the mechanized stare..."

Description:

Ptolemy is a four video, four audio channel Video Monitor Matrix with a ten minute repeated program. Each of the four video disk players provides one video and two audio sources to [XX]16 video monitors and four speakers. A video synchronizer aligns the four channels of video for a synchronous playback. At the end of each cycle the program automatically returns and re-synchronizes for a repeat performance.

Synchronizer:
The Laser Disk Synchronizer used by the Vasulkas is custom build and interfaces with Pioneer Industrial Laser Disk Players (2200 to 8000 series) It is not interchangeable with other manufacturers of Laser Disk Players. [Other brands (Sony, Phillips) require a different (commercially available) synchronizing device.]
*The basic rule here is to set up the proper and deep color black as a reference to the maximum contrast and brightness. With that the other components (hue, color saturation) can be assigned. But in final the persons installing the environment must use their esthetic judgment as to the proper settings and visual impact of the exhibit.

Daily Operations:

Start up:
Power up Monitors, Disk Players and Synchronizer
Verify that the installation is starting synchronously.
If not, turn power off and on again. If problem persists notify Steina by phone, fax or e-mail.

Shut down:
Turn power off the Monitors, Disk players and Synchronizer

Maintenance:
The monitor screens need to be cleaned with a soft cloth at least once a week

Power requirement (depending on equipment used):
Video monitors: Sony PVM 1910 120 watts
Stereo Amplifiers: Technics/Sony 150 watts
Video Disk Players: Pioneer 2200 70 watts
Pioneer 8000 100 watts
Synchronizer: Gritzo 1 40 watts
Outside USA, a Power Transformer 220 to 110, 1000w

Shipping information:
4 program disks, 4 Disk players, 2 Stereo Amps, 1 Sync Box, 4 Speakers, AC box, all Cables.
The 16 monitors must be matching in size and manufacture. They should be stacked four by four on a single low bench or four square platforms one foot (30 cm) high. The dimensions must be custom made to the size and shape of the monitors. The equipment except the monitors and speakers should be located inside the platform. The matrix is wired in the following manner:

1 - 2 - 3 - 4
4 - 3 - 2 - 1
2 - 1 - 4 - 3
3 - 4 - 1 - 2

The terminators must be open except for the last monitor on each chain.

If the monitor speakers are of superior quality, the audio can be chained the same way as the video. (4 discreet audio channels), the volume tuned so the sound emanates from each monitor in equal intensity.

Alternate audio wiring:
Connect the two stereo cables from each player to the amplifiers, and the eight speaker cables to the speakers. The speakers should be hung on the walls at equal distances.

Sound and image alignment (tuning):

Video:
Contrast: maximum
Brightness: half way between minimum and the middle*

Sound:
Treble: normal
Base: maximum
The space:

Minimal Active Space (see drawing/floor plan):
?? meters by ?? meters by 3.5 meters high
?? feet by ?? feet by 12 feet high

The major consideration of space is the total avoidance of ambient light. The space should be painted in non-reflective black and no light source other than the one that emanates from monitors themselves should exist. The entrance must be well isolated for light and sound. Most ideal is a double trap door with sound insulating material (see drawing).

********************************************************************************

Technical notes for installing, setting up, operating and maintaining the exhibit

Itemized Equipment List for Ptolemy:

16 Stackable Matching Video Monitors
4 Pioneer Video Laser Disk Players, LD-V Series
4 Program Video Laser Disks, NTSC, Color
1 Four Channel Synchronizer
2 Stereo Audio Amplifiers (4 audio channels)
4 Speakers (Internal Speakers of superior quality may be used).
4 Speakers stands or Wall Mounts
10 Video Cables ca 3 feet (1 meter) long
2 Pairs of Stereo Cables
4 Speaker Cables
21 Power Outlets