

STEINA VASULKA

VIDEO INSTALLATIONS

ENVIRONMENTS

& PERFORMANCES

INTRODUCTION

Ever since the art of video first made its way to the gallery, the Vasulkas have been active participants in the development of this particular art form. Although the individual works of Steina and Woody appear with the copyright label of "The Vasulkas," two distinct bodies of work have evolved under their separate personalities.

Steina's installations are composed in multiple channels of images and sounds. Strongly pictorial, they are composed in the dynamic fashion of polyphonic music — music being the artistic craft for which she was trained and still practices. Her video installations fall into two basic categories: *Video Matrixes*, and *Projected Video Environments*. As the labels suggest, the difference lies in the use of video projectors or video monitors for image presentation. Video matrixes rely on multiple video monitors stacked in specific configurations, and projected environments make use of video projectors to project images onto screens or walls.

Usually, Steina's choice of technology is deliberate, but in general there is a lot of flexibility and sense of play in setting up these installations and environments. Projected video has opened new opportunities (for the treatment of video images) in relationship to exhibition spaces — opportunities unavailable when some of the works were created. Therefore, Steina's earlier works increasingly appear in projected form. She favors screens made of material with translucent properties, where the image appears on the front and rear surfaces of the screen with equal intensity.

In this search for the new canvas, Steina has turned away from the traditional horizontal window of film and television toward vertical or amorphous formulations — frequently conceived during the image-gathering process by positioning the camera on its side without reference to ground or gravity.

Relatively easy to install and operate, her installations and environments use standard audio and video equipment. They can generally be set up by gallery personnel, except in a few cases where the artists presence is necessary.

In short, Steina currently prefers projected video to the video monitor versions, and she does not mind working with oddly-shaped or complicated spaces, with basic-level equipment and/or financial restrictions.

B R I E F B I O G R A P H Y

Steina was born Steinunn Briem Bjarnadottir in Reykjavik, Iceland, in 1940. She studied violin and music theory, and in 1959 received a scholarship from the Czechoslovak Ministry of Culture to attend the State Music Conservatory in Prague.

Woody and Steina married in Prague in 1964, and shortly thereafter she joined the Icelandic Symphony Orchestra. After moving to the United States in 1965 she worked in New York City as a freelance musician. The Vasulkas began working with video in 1969, and in 1971, with Andres Mannik, they founded The Kitchen, an electronic media theater. Since 1980 they have lived in Santa Fe, New Mexico.

Steina has been an artist-in-residence at the National Center for Experiments in Television, at KQED in San Francisco, and at WNET/Thirteen in New York. In 1988 she was an artist-in-residence in Tokyo on a U.S./Japan Friendship Committee grant. In 1996 she served as the artistic co-director and software collaborator at the STEIM Institute for Electronic Instrumental Music in Holland. She has received funding from the New York State Council on the Arts, the National Endowment for the Arts, the Corporation for Public Broadcasting, the Guggenheim Foundation, the Rockefeller Foundation, the American Film Institute and the New Mexico Arts Division. She received the American Film Institute Maya Deren Award in 1992 and the Siemens Media Art Prize in 1995. Under the auspices of Montevideo in Amsterdam her various installations have been shown in and outside Holland, and with other major exhibitions in recent years in Austria, Iceland, and Italy. In 1993 she co-curated with Woody the exhibition and catalogue, *Eigenwelt der Apparatewelt* (pioneers of electronic art) produced by Peter Weibel for Ars Electronica in Linz, Austria. In 1996 Steina and Woody exhibited eight new media installations under the title "Machine Media" at the San Francisco Museum of Modern Art, an exhibition repeated in Santa Fe a few months later.

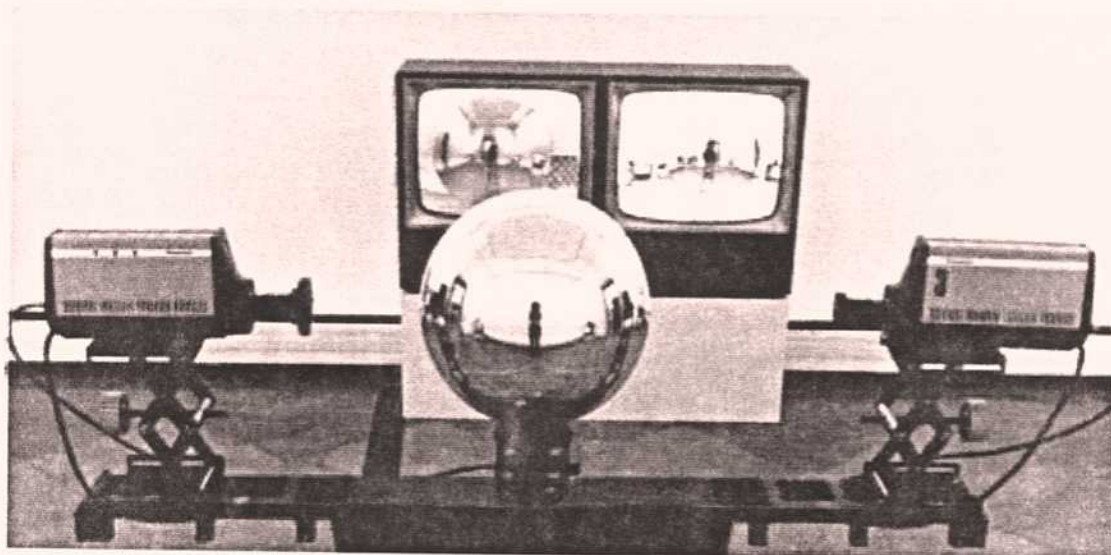
ALLVISION 1976

AN ELECTRO/OPTO/MECHANICAL INSTALLATION BY STEINA

ALLVISION incorporates and transforms physical space through video. In this installation, Steina transfigures the viewer's orientation: a constructed physical space is engaged in conversation with the perceptual systems of the human eye and the camera lens.

ALLVISION poses questions about the process of transcribing all-encompassing space and the ways in which perception can be altered or exaggerated by a mechanical interface. The machine allows a view of what would otherwise be impossible to perceive; it privileges vision to experience the implausible and fantastic.

— MARITA STURKEN, WRITER AND CURATOR



DESCRIPTION

A mirrored sphere, positioned in the middle of a crossbar reflects the image of surrounding space. Two video cameras, attached to each end of the crossbar are looking in at the mirrored surface. The crossbar — now an assembly of mirrored sphere and two cameras — slowly rotates on the turntable with cameras orbiting the sphere. Since each camera sees half of the reflected space, the whole space becomes observable.

The turntable, which sits on a low pedestal, holds the driving mechanism for the rotation — a slip-ring assembly and a DC motor. The slip-ring assembly provides uninterrupted video signals from, and power to, the cameras. The video signal from two cameras connects to two (or more monitors) arranged in the exhibit space.

THE SPACE

Since the only pictorial input into this installation is its immediate surroundings as seen by the cameras, the choice of space assumes a critical role. Odd spaces of intersecting corridors, staircases, corners with horizontal, vertical, or diagonal shapes and shadows are an ideal backdrop for the observer approaching the exhibit. When only a featureless room is offered, Steina includes large vertical panels of relevant images (created by Woody Vasulka) to be mounted on the walls to provide the installation backdrop.

ALLVISION (and MACHINE VISION) are the only works of Steina's requiring daylight or a fair amount of artificial illumination. They are closed-circuit environments with no additional media on tape or disk. There is no audio present.

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 2 video cameras
- 2 camera housings
- 2 adjustable camera stands
- mirrored sphere
- sphere stand
- crossbar
- cast aluminum turntable assembly (with gears and DC motor)
- 2 DC power supplies (1 for the two cameras, 1 for the turntable)
- 2 (or more) large monitors (25")
- 4 power outlets
- AC and video cables

PLATFORM

The installation rests on the platform stand, 18 x 18 x 18 inches (gallery support choice), strategically placed in the exhibit space, usually at the center.

ASSEMBLY AND DISASSEMBLY

1. Place the cast aluminum turntable on the floor or on the provided platform.
2. Attach the VDC power supply to verify that the turntable works before further assembling.
3. Attach the mirrored sphere to the crossbar before placing the bar on the platform.
4. Remove the screws on the top of the turntable, place the crossbar with the sphere on it and fasten with the same screws.
5. Attach the two camera platform assemblies on each end of the crossbar, with cameras looking in.
6. Connect BNC cables from the two cameras to A and B marked BNC jacks tucked under the top of the turntable. These cables should be hidden under the crossbar, and fastened with the Velcro strips provided.
7. The DC power cables are cabled the same way.
8. At the bottom of the turntable there are two BNC jacks and a single DC jack for the external power supply.
9. Connect the DC power to the cameras and the BNCs to the monitors to verify the presence of a signal.
10. Start the turntable.
11. Disassemble in the reverse order.

THE DISPLAY

Although this work depends on good illumination of its immediate environment, the use of video monitors poses a critical dilemma: how to present a strong image in the presence of general lighting. The monitors therefore should not be receiving direct light or have strong surface reflections. The space should be flooded in all directions either by artificial or natural light; then, by adjusting the lens opening or by using a lower light level on the cameras and setting the monitors to high contrast, a balance between the image on the monitor and the light level should be achievable.

VIDEO ADJUSTMENT

All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the monitors, turntable, and cameras (the two AC power strips). Verify that the installation goes into motion and displays video on the monitors. If not, turn power off and on again. If problem persists notify Steina by phone, fax, or e-mail.

TO SHUT DOWN: Power down monitors, turntable, and cameras.

MAINTENANCE: The mirrored sphere and monitor screens need to be cleaned with a soft cloth at least once a week.

POWER REQUIREMENTS

(depending on equipment used)

Video monitors:	Sony PVM 1910	120 watts
Video cameras	CCDs	15 watts
Turntable		40 watts

NOTE: PAL/NTSC cameras/monitors must be of a matching standard. Outside USA, use a power transformer 220 to 110, 500w.

CREDITS

At the entrance these credits should appear:

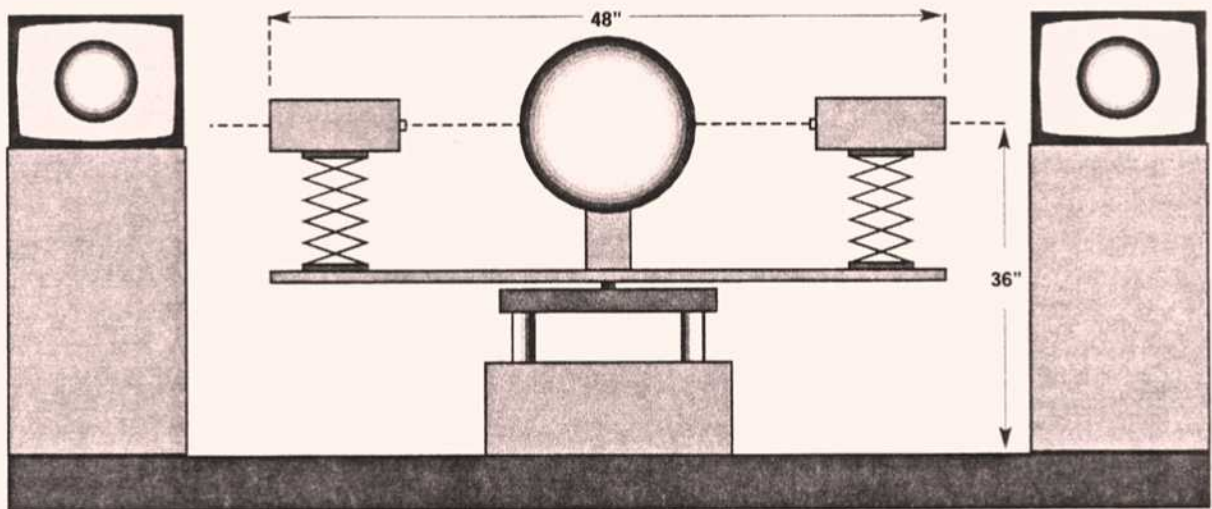
"ALLVISION by Steina, with instrumentation by Josef Krames, Woody Vasulka, and Bruce Hamilton"

SHIPPING INFORMATION

Installation is shipped in four crates. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu



MACHINE VISION 1978

AN ELECTRO/OPTO/MECHANICAL ENVIRONMENT BY STEINA

STEINA: "When a human being operates the camera, the assumption is that the camera is an extension of the eye. You move the camera the way you move the head and the body. In video, unlike photography or film, the viewfinder is not necessarily an integral part of the camera apparatus. . . .

"In the late seventies, I began a series of environments titled *MACHINE VISION* and *ALLVISION*, with a mirrored sphere. Another variation has a motorized moving mirror in front of the camera so that depending on the horizontal or vertical positioning of the mirror, the video monitor displays a continuous pan or tilt either back/forth or up/down. A third variation is a continuous rotation through a turning prism, while still another has a zoom lens in continuing motion, in/out. These automatic motions simulate all possible camera movements freeing the human eye from being the central point of the universe."



DESCRIPTION

One of the first works in the *MACHINE VISION* project, and central to it, is *ALLVISION*, a rotating spherical device that mediates the viewer's perception

of total space. (See separate *ALLVISION* description.) *MACHINE VISION* includes *ALLVISION* as well as a collection of smaller instruments operating under specific assignments: pan, tilt, zoom, rotation, double rotation, and bird's-eye view. Here the camera is stationary and various optical attachments in front of the lens are set into motorized motion, providing a summary of the syntactic language of the camera. Each of the instruments contains its own motor assembly, camera, mirror, and power supply mounted on a tripod — with *ALLVISION*, this makes seven stand-alone mini-installations:

In *Rotation*, a camera fitted with a motorized prism lens provides a continuous rotation.

In *Zoom*, a camera fitted with a motorized zoom lens provides a continuous in/out zoom.

In *Pan*, a moving mirror assembly placed in front of the camera provides a continuous pan, back and forth.

In *Tilt*, a moving mirror assembly placed in front of the camera provides a continuous tilt, up and down.

In *Double Rotation (Slant Mirror)*, a vertically placed camera points into a rotating slanted mirror, resulting in a rotation on two axis, horizontal and vertical.

In *Bird's-Eye*, a vertically placed camera is fitted with a motorized prism lens and a small mirrored sphere, providing a continuous rotation.

THE SPACE

Since the only pictorial input into this installation is its immediate surroundings as seen by the cameras, the choice of space assumes a critical role. Odd spaces of intersecting corridors, staircases, corners with horizontal, vertical, or diagonal shapes and shadows are an ideal backdrop for the observer approaching the exhibit. When only a featureless room is offered, Steina includes large vertical photo panels by Woody Vasulka to be mounted on the walls to provide a graphic backdrop.

MACHINE VISION (and *ALLVISION*) are the only works of Steina's requiring daylight or a fair amount of artificial illumination. They are closed-circuit environments with no additional media on tape or disk. There is no audio present.

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

1. ALLVISION (see separate description)

2. ROTATION: A camera fitted with a motorized prism lens provides a continuous rotation.

- video camera
- motorized prism lens
- power supply (12 VDC)
- power supply (3 VDC)
- tripod
- video cable to monitor
- power cable

3. ZOOM: A camera fitted with a motorized zoom lens provides a continuous in/out zoom.

- video camera
- motorized zoom lens
- power supply (3 VDC)
- power supply (12 VDC)
- power supply (12 VDC)
- tripod
- video cable to monitor
- power cable

4. PAN: A moving mirror assembly placed in front of the camera provides a continuous pan, back and forth.

- video camera
- motorized mirror assembly
- power supply (12 VDC)
- power supply (12 VDC)
- tripod
- video cable to monitor
- power cable

5. TILT: A moving mirror assembly placed in front of the camera provides a continuous tilt, up and down.

- video camera
- motorized mirror assembly
- power supply (12 VDC)
- power supply (12 VDC)
- tripod
- video cable to monitor
- power cable

6. DOUBLE ROTATION (slant mirror): A vertically placed camera points into a rotating slanted mirror, resulting in a rotation on two axis, horizontal and vertical.

- video camera
- motorized mirror assembly
- power supply (12 VDC)
- power supply (3 VDC)
- tripod
- video cable to monitor
- power cable

7. BIRD'S-EYE: A vertically placed camera is fitted with a motorized prism lens and a small mirrored sphere providing a continuous rotation.

- video camera
- motorized prism lens
- power supply (12 VDC)
- power supply (3 VDC)
- tripod
- video cable to monitor
- power cable

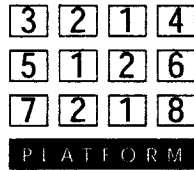
SUMMARY OF EQUIPMENT

- 8 b/w video cameras
- 15 powersupplies
- 2 moving mirror assemblies
- 2 prizm lenses
- 1 bird's-eye lens
- 1 zoom lens
- 1 slant mirror
- 7 tripods

NOTE: These mini installations come pre-assembled. They need only to be mounted on tripods and arranged in space. There are 8 video cables from each installation to the monitors.

MONITOR MATRIX AND PLATFORMS

The placement of the monitors is determined by the size of the monitors and the space itself. A matrix of 12 monitors, 3 x 4 is recommended. The following diagram shows the wiring sequence for 12 monitors.



THE DISPLAY

By selecting more sensitive cameras, the general light level in the environment could be kept low and the balance of light could tip in favor of stronger display image. The monitors should therefore not be exposed to direct light. The space should be flooded in all directions either by artificial or natural light. It is important that the environment reflected in the sphere exhibits great variety of forms and architectural features, contrast in color and brightness. The dynamic additions to the environment are the viewers.

VIDEO ADJUSTMENT

All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the monitors, cameras and motors at each station. Verify that each installation goes into motion and displays video on the monitors. If not, turn power off and on again. If problem persists notify Steina by phone, fax or e-mail.

TO SHUT DOWN: Power down monitors, cameras, and motor assemblies.

MAINTENANCE: The mirrored sphere, moving mirrors, and monitor screens need to be cleaned with a soft cloth at least once a week.

POWER REQUIREMENTS

Video monitors (12)	Sony PVM 1910	120 watts
VDC Power Supplies (15)		5 watts
Turntable	15VDC	40 watts

NOTE: All power supplies for MACHINE VISION are dual standard, 110 to 220 VAC. Video: PAL/NTSC (cameras/monitors of a matching standard).

LIST OF POWER SUPPLIES

1. Allvision	12VDC + 12VDC
2. Rotation I	12VDC + 3VDC
3. Zoom	12VDC + 3VDC + 12VDC
4. Pan	12VDC + 12VDC
5. Tilt	12VDC + 12VDC
6. Slant Mirror	12VDC + 05VDC
7. Rotation II	12VDC + 03VDC

C R E D I T S

At the entrance these credits should appear:

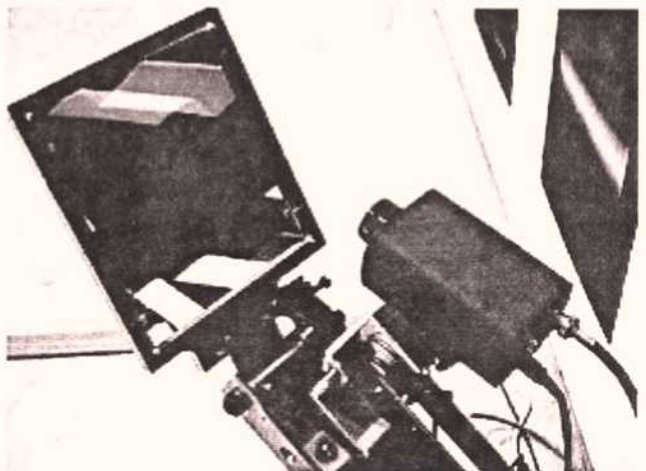
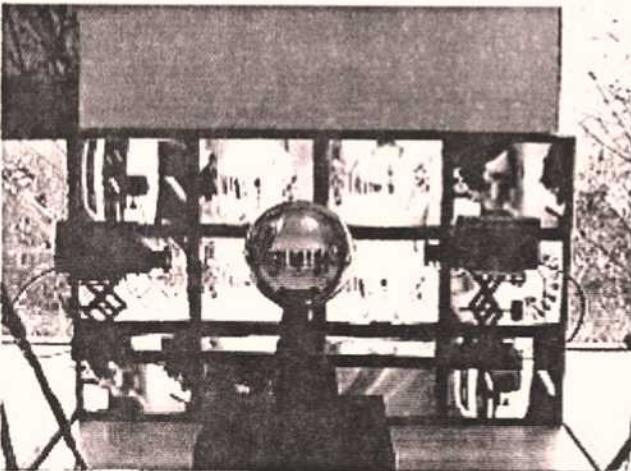
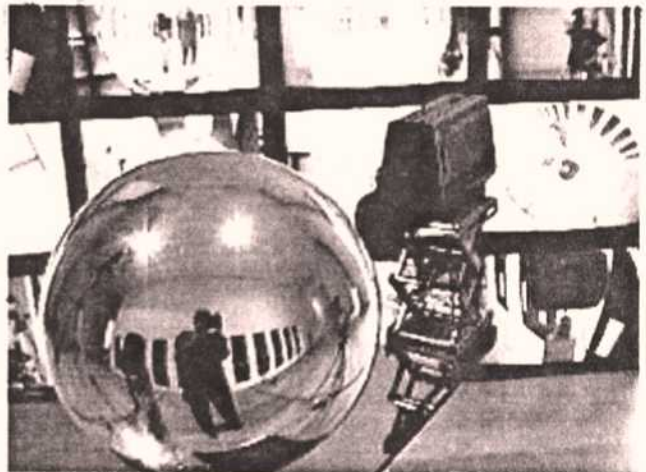
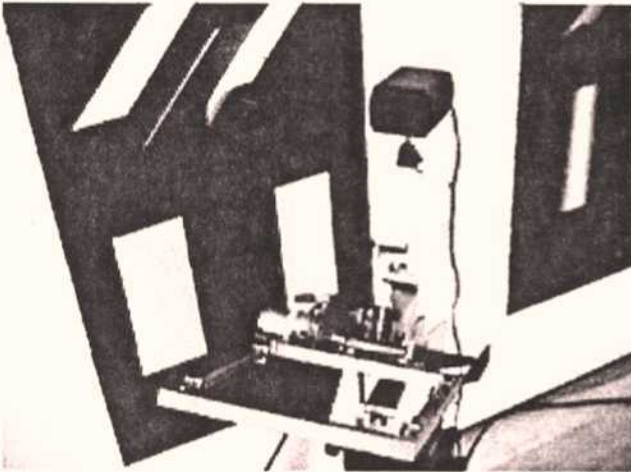
"MACHINE VISION by Steina, with instrumentation by Josef Krames, Woody Vasulka, and Bruce Hamilton."

S H I P P I N G I N F O R M A T I O N

The seven mini-installations can be shipped in three large crates. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu



THE WEST 1983

A VIDEO MATRIX INSTALLATION BY STEINA

AUDIO BY WOODY VASULKA

THE WEST revels in the vastness of the western spaces, the primeval quality of the landscape and ancient architecture, the rich colors of the earth and sky, and the all-encompassing light and warmth of the sun. The complex layering of spaces and the electronic manipulation of image, color, and form so central in Steina's earlier work is still an important aspect of this installation. But *THE WEST* is emphatically a tribute to the grandeur of nature.

— WILLIAM D. JUDSON, CURATOR, CARNEGIE MUSEUM OF ART, PITTSBURGH



DESCRIPTION

THE WEST is a two video, four audio channel installation with thirty minutes of repeating program. Each of the two video laser disk players provides one video and two audio sources to a bank of video monitors and four speakers. A video synchronizer aligns the two channels of video for synchronous playback. At the end of each thirty-minute cycle, the program automatically returns and re-synchronizes for a repeat performance.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from the monitors themselves. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. There should be a bench seating 4–5 people. (See floor plan and entrance diagrams.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 22 stackable matching video monitors
- 11 monitor support platforms
- 2 Pioneer Video Laser Disk Players, LD-V Series
- 2 program video laser disks, NTSC, color
- 1 two-channel synchronizer
- 2 stereo audio amplifiers (4 audio channels)
- 4 speakers
- 4 speaker stands or wall mounts
- 22 video cables approx. 3 feet (1 meter) long
- 2 pairs of stereo cables
- 4 speaker cables
- 27 power outlets

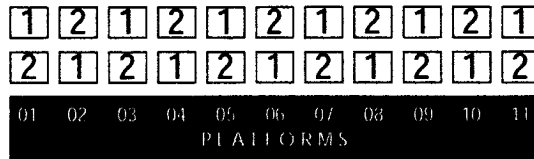
NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing device.

VIDEO MONITORS AND MONITOR PLATFORMS

The 22 monitors must be matching in size and manufacture. They should be stacked in pairs two rows high, eleven pairs on eleven separate platforms. The individual platforms are two feet high and layed out in a curve (see floor plan). As to depth and width, the platforms must be custom-made to the size and shape of the monitors. All of the auxiliary equipment, such as players, amplifiers, and synchronizer should be located inside the back of these platforms.

MONITOR MATRIX WIRING

The following diagram shows the wiring sequence for the monitor matrix.



AUDIO WIRING

Connect the pair of stereo cables from each player to the two (stereo) amplifiers, and the four speaker cables to the speakers. The speakers should be placed or hung on the walls in the four corners of the room.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the monitors, disk players, and synchronizer. Wait a short while to verify that the installation is starting synchronously. If not, turn power off and on again for the players and the synchronizer. If problem persists, notify Steina by phone, fax, or e-mail.

TO SHUT DOWN: Turn off power to the monitors, disk players, and synchronizer.

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

POWER REQUIREMENTS

(depending on equipment used)

Video monitors:	Sony PVM 1910	120 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

NOTE: Outside USA, use a power transformer 220 to 110, 1000w.

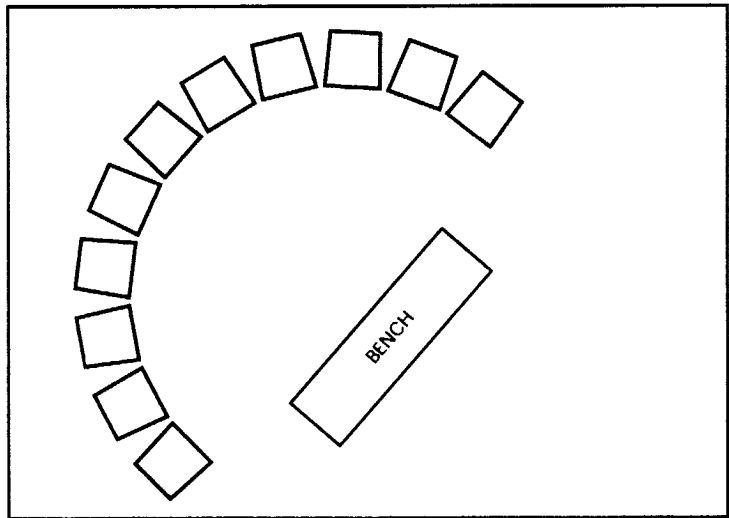
SHIPPING INFORMATION

Installation is shipped in one crate. Weight and dimensions available upon request.

Shipped to and from:

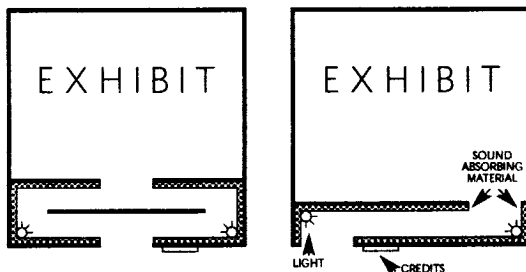
Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu

FLOOR PLAN



Suggested floor plan subject to change according to the proportions of the exhibition space.

LIGHT-TRAP / SOUND-TRAP ENTRANCES



GEOMANIA 1987

A VIDEO MATRIX INSTALLATION BY STEINA

In GEOMANIA, site recorded images and sounds are electronically layered so that the North Atlantic surf washes through Arches National Park, and a bubbling Icelandic hot spring percolates through the desert clouds — a sensuous display of electronically generated color and texture.

There are many paradoxes in this work, not only the paradox between free-form image gathering and very rigorous presentation requirements, and the paradox between the land and the sea, but the real obvious one between an emphasis on technology and romantic beauty. In a way, this work seems to be a sweet autobiographical romance.

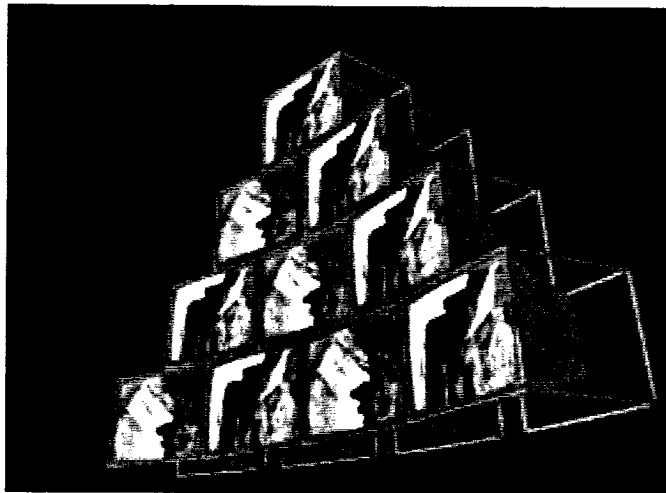
— MALIN WILSON, WRITER AND CURATOR

In GEOMANIA, images wash through the dry desert in ocean waves, the steam and gases of the volatile Icelandic landscape and viscous lava rock unfold on the screen. Here, the landscape is not rooted in gravity, it is amorphous, malleable, and changeable. Embedded with layers of geological time, it is simultaneously death and birth; it transcends time.

— MARITA STURKEN, WRITER AND CURATOR

STEINA: "I find beauty always somewhat intimidating. I moved to Santa Fe in 1980 from Buffalo, New York because I wanted to experience what it is to live in beauty. To me, living in the 20th century, nature not altered by man is romantic.

I did not expect that working in the Southwest was going to affect my images as much as it did. After all I am an urban product. For the first two years I resisted it. First of all because the beauty of the West is too seductive, secondly it's simply overpowering. I did not feel up to it. I mean, are you going to take on God?"



DESCRIPTION

GEOMANIA is a two video/four audio channel video matrix on a 15-minute repeating loop. Each of the two video laser disk players provides one video and two audio sources to a bank of video monitors and four speakers. A synchronizer aligns the two channels of video for a synchronous playback. At the end of each 15-minute cycle the program automatically returns and re-synchronizes for a repeat performance.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See entrance diagram.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 10 stackable matching video monitors
- 2 Pioneer Video Laser Disk Players, LD-V Series
- 2 program video laser disks, NTSC, color
- 1 two-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 approx. 3 feet (1 meter) long each
- 2 pairs of stereo cables
- 4 speaker cables
- 15 power outlets

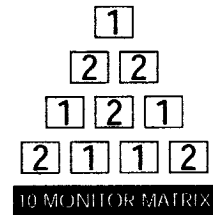
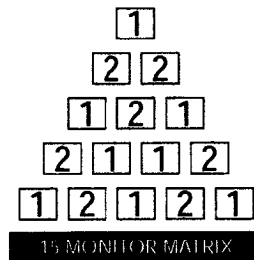
NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing device.

VIDEO MONITORS AND MONITOR PLATFORMS

The ten (15, 21) monitors must be matching in size and manufacture. They should be stacked in a pyramid fashion on four square platforms one foot (30 cm) high or a single low bench. The platforms must be custom-made to the size and shape of the monitors. The auxiliary equipment (players, amplifiers, synchronizer) should be located inside these platforms.

MONITOR MATRIX WIRING

The matrix is pyramid configured and wired in the following manner.



AUDIO WIRING

Use internal speakers or connect the two stereo cables from each player to the two amplifiers, and the four speaker cables to the speakers. The speakers should be hung on the walls at equal distances.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the monitors, disk players and synchronizer. Wait a while to verify that the installation is starting synchronously. If not, turn power off and on again for the players and synchronizer. If problem persists, contact Steina by phone, fax, or e-mail.

TO 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 REQUIREMENTS

(depending on equipment used)

Video monitors:	Sony PVM 1910	120 watts
Stereo Amplifiers:		150 watts
Video Disk Players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

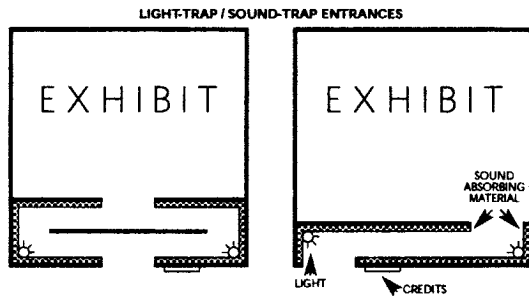
NOTE: Outside USA, use a Power Transformer 220 to 110, 1000w.

SHIPPING INFORMATION

Installation is shipped in one crate. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu

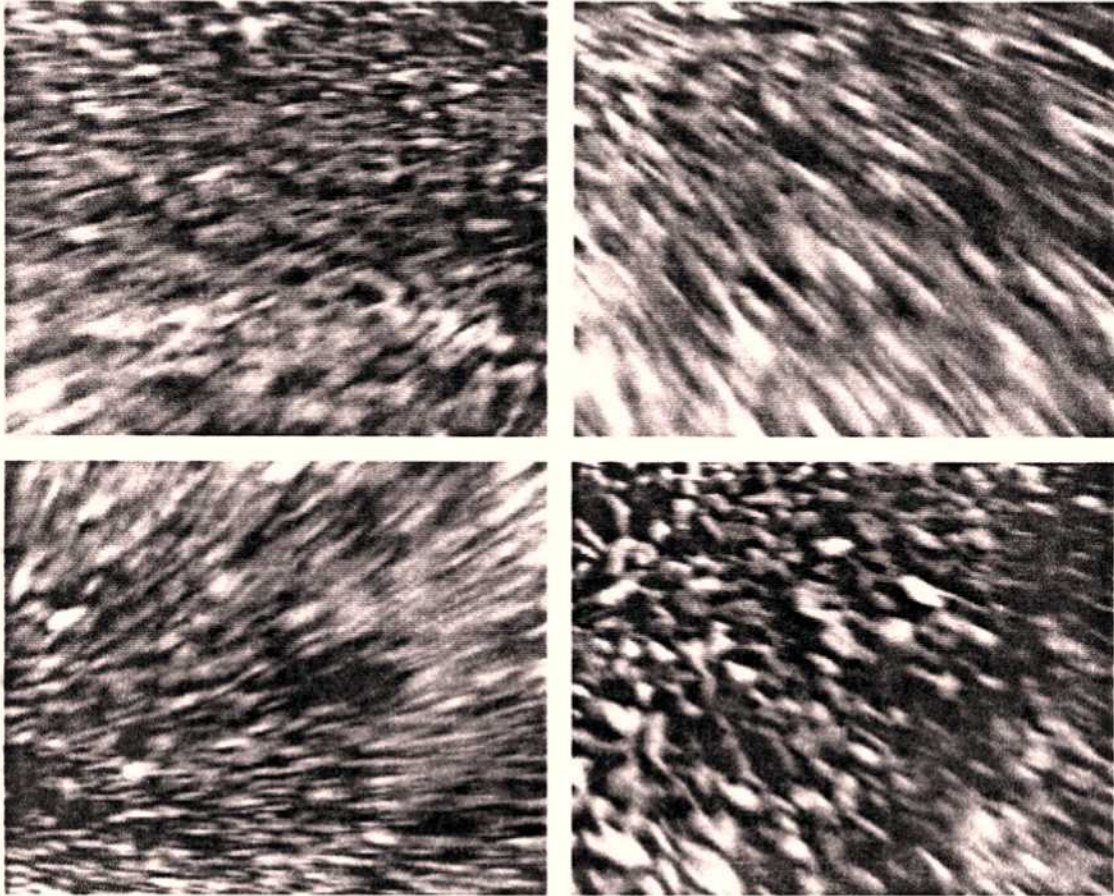


PTOLEMY 1990

A VIDEO MATRIX INSTALLATION BY STEINA

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 processors adding to the surrealistic quality of this machine performance.

— WOODY VASULKA



DESCRIPTION

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

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See floor plan and entrance diagrams.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 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
- 4 stereo audio amplifiers (8 audio channels)
- 8 speakers (internal speakers of superior quality may be used)
- 8 speakers stands or wall mounts
- 10 video cables approx. 3 feet (1 meter) long each
- 2 pairs of stereo cables
- 4 speaker cables
- 21 power outlets

NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing device.

VIDEO MONITORS AND MONITOR PLATFORMS

The 16 monitors must be matching in size and manufacture. They should be stacked four by four on a single low platform one foot (30 cm) high. The platforms must be custom-made to the size and shape of the monitors. The auxiliary equipment should be located inside the platforms.

MONITOR MATRIX WIRING

The matrix is wired in the following manner.



AUDIO WIRING

If the monitor speakers are of superior quality, the audio can be chained the same way as the video (8 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 ADJUSTMENT

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: 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.

TO 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 REQUIREMENTS

(depending on equipment used)

Video monitors:	Sony PVM 1910	120 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

NOTE: Outside USA, use a Power Transformer 220 to 110, 1000w.

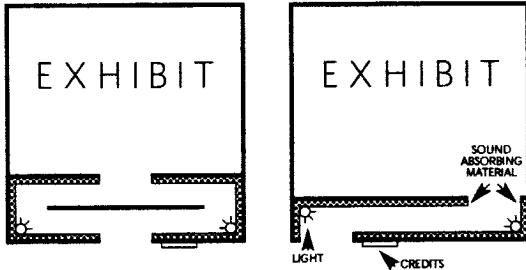
SHIPPING INFORMATION :

Installation is shipped in 2 crates. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu

LIGHT-TRAP / SOUND-TRAP ENTRANCES



VOCALIZATIONS 1990

A PROJECTED VIDEO ENVIRONMENT BY STEINA

WITH JOAN LA BARBARA

There is an integration of sound and image in which the singing voice of Joan La Barbara produces energetic permutations in a grid of lines reminiscent of the musical staff of traditional music notation, forming a window onto images of a moving landscape. The rifts, chants, and scat singing of La Barbara's voice become a visual dance in this electronic scape.

— MARITA STURKEN, WRITER AND CURATOR



DESCRIPTION

VOCALIZATIONS is a projected video environment for four video and eight audio channel presentation in a fifteen minute repeating program. Each of the four video disk players provides one video and two audio sources to four screens and eight speakers. A synchronizer aligns the four channels of video for synchronous playback. At the end of each cycle the program automatically returns and re-synchronizes for a repeat performance.

In creating VOCALIZATIONS, the singer Joan La Barbara not only made sounds but virtually composed the work in the style of real-time performance: images of the Southwest desert landscapes were intercut and combined by her voice pattern while she observed incoming visuals. Later, Steina added speed changes, directional variations, and additional electronic voice processing to the final collage.

THE SPACE

The minimum active space required is 7.5 meters by 7.5 meters by 3.5 meters high, or 25 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted white but no light source should exist, other than the one that emanates from the projectors themselves. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See floor plan and entrance diagrams.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

4 matching projectors	4 speakers
4 projector stands	4 speaker stands or wall mounts
4 Pioneer Video Laser Disk Players, LD-V series	10 video cables approx. 3 feet (1 meter) long each
4 program video laser disks, NTSC, color	2 pairs of stereo cables
1 four channel synchronizer	4 speaker cables
2 stereo audio amplifiers (4 audio channels)	21 power outlets

NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing device.

PROJECTORS AND SPEAKERS PLACEMENT

The projectors are placed on the floor in the middle of the exhibition space aiming into the four corners, breaking the video frame on the two walls. The speakers are dispersed at equal distances in the hall.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up disk players and synchronizer, turn the projectors on (verify pilot light). Wait a short while to verify that the installation is starting synchronously. If not, turn power off and on again for the players and synchronizer, **NOT THE PROJECTOR**. If problem persists, notify Steina by phone, fax, or e-mail.

TO SHUT DOWN: Turn the projector's power off locally (the fan will keep going until the units have sufficiently cooled down). After the fans stop, turn off power distributors for the projectors, disk players, and synchronizer.

ATTENTION: the projectors may only be turned off by the power switch on the units and never by pulling the cable out, as the unit needs to be cooled down (about one minute) by the internal fan.

MAINTENANCE: The projection lenses and the mirrors need to be cleaned with a soft cloth at least once a week.

POWER REQUIREMENTS

(depending on equipment used)

Video projectors:	Sharp XG-2000U	230 watts
	Sharp XV- P10U	175 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

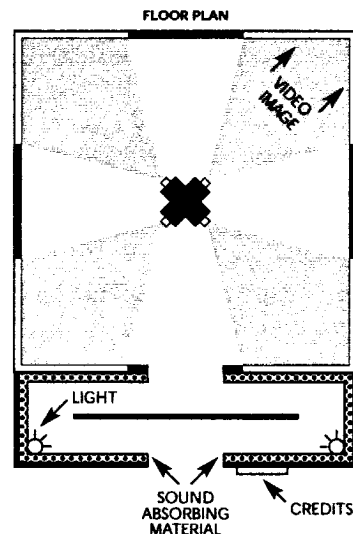
Outside USA, use a Power Transformer 220 to 110, 1000w.

SHIPPING INFORMATION

Installation is shipped in three crates. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu



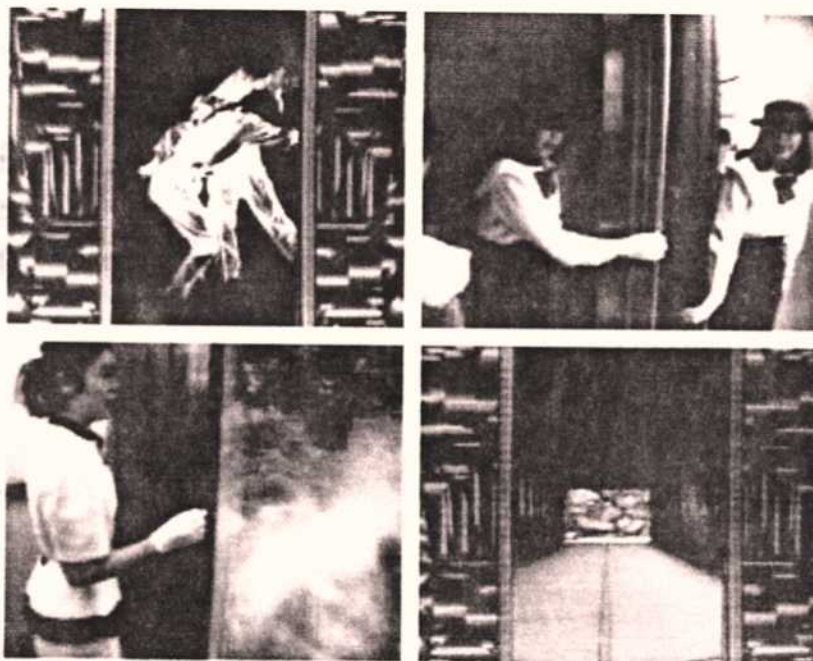
TOKYO FOUR 1991

A VIDEO MATRIX INSTALLATION BY STEINA

No form of moving-image art comes as close to musical composition as multiscreen video, where the different channels of image and sound are equivalent to musical polyphony, each functioning like a voice in a musical ensemble. And no multiscreen work is as spectacularly musical as Steina's. She works as a composer would, playing on the visual equivalents of timbre, texture, and tone. TOKYO FOUR is the audio-visual equivalent of a string quartet. In one compositional strategy, Steina begins by assembling a long single-channel segment which represents the "melody," or what she calls the "ground track." Sometimes one screen is the melody and the others are accompaniment, then another screen takes the lead. A musical syntax emerges from this visual point/counterpoint. . . .

TOKYO FOUR is organized around categories of imagery: Shinto priests meticulously grooming their Zen garden on New Year's Eve; train conductors monitoring rush hour crowds; elevator girls bringing a superfluous, but charming High Touch to the high tech world of the shopping malls, reminding shoppers to watch their umbrellas and to not forget their children; a segment about food, beginning with the vertiginous fisheye lens in a supermarket; and an emotionally charged metachoreography of a dance troupe's performance and curtain call. Her compositional devices include flipping or reversing an image and playing it at imperceptibly different speeds on different screens, which gradually all synchronize at the same speed. These strategies are especially effective in the final movement when the female dancer is bowing. The Lehar's waltz the dancers use would be banal without the manipulations of Steina's spectacular visual matrix, which transforms it into something at once exotic and poignant.

—GENE YOUNGBLOOD,
MEDIA THEORIST



DESCRIPTION

TOKYO FOUR is a four video, four audio channel installation with twenty-three minute repeating program. Each of the four laser disk players provide one video and two audio sources to 12 video monitors and four speakers. A video synchronizer aligns the four channels of video for synchronous playback. At the end of each cycle, the program automatically returns and re-synchronizes for a repeat performance.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See entrance diagrams.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 12 stackable matching video monitors (could be as few as 4)
- 1 monitor support table (custom)
- 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 approx. 3 feet (1 meter) long each
- 2 pairs of stereo cables
- 4 speaker cables
- 21 power outlets

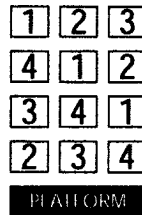
NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing device.

VIDEO MONITORS AND MONITOR PLATFORMS

The 12 monitors must be matching in size and manufacture. They should be stacked three by four on a single low bench or square platform one foot (30 cm) high. The platform must be custom-made to the size and shape of the monitors. The equipment except the monitors and speakers could be located inside the platform or in an adjacent tech area.

MONITOR MATRIX WIRING

The matrix is wired in the following manner.



AUDIO WIRING

If the monitor speakers are of superior quality, the audio can be chained the same way as the video (4 discrete 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 two amplifiers, and the four speaker cables to the speakers. The speakers should be hung on the walls at equal distances.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the 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.

TO 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 REQUIREMENTS

(depending on equipment used)

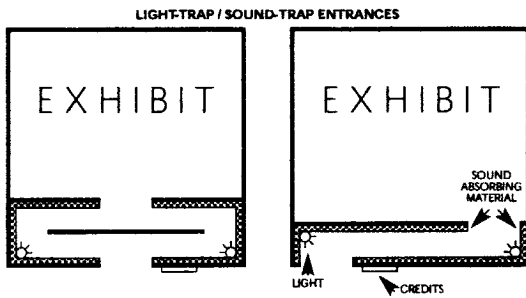
Video monitors:	Sony PVM 1910	120 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts
Outside USA, use a Power Transformer 220 to 110, 1000w.		

SHIPPING INFORMATION

Installation is shipped in 2 crates. Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu

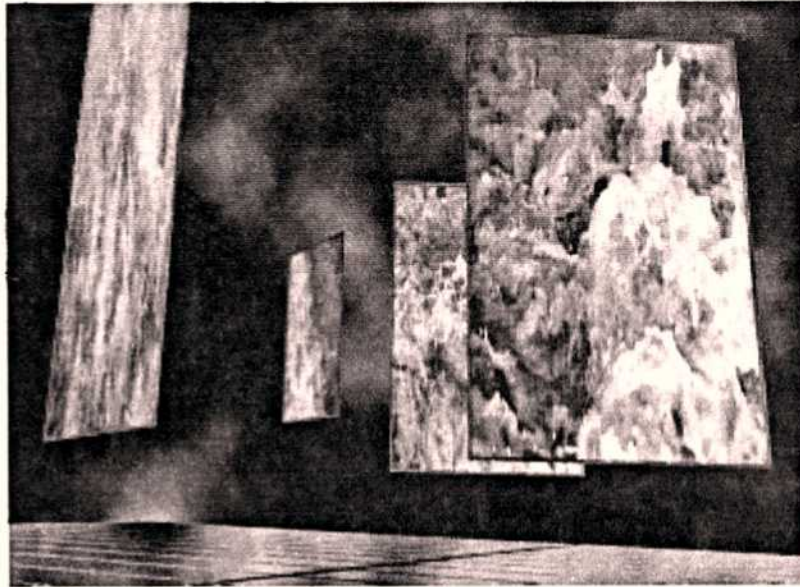


BOREALIS 1993

A PROJECTED VIDEO ENVIRONMENT BY STEINA

Steina's means are simple. She takes stunningly beautiful yet turbulent clips of nature in her native Iceland, enlarges them, then turns them on end, literally and figuratively, so that they may be experienced as living abstractions on a scale equal to that of the human body. The effect is to tear them from their entrenchment in the cliché so they may be perceived free from the drag of representational history. Nature, having somehow survived the twentieth century onslaught of archaic industrial insults, speaks in the only way it can, through stormy electronic images by an artist with roots both in urban culture and in a remote land still precariously preserved in ice.

— LANE BARDEN, WRITER AND ART CRITIC



DESCRIPTION

BOREALIS is a projected video environment with two video and four audio channels of presentation. The projectors, laid on their sides, provide an upright ratio for large projection screens, hung vertically in the exhibit space. Half-transparent mirrors, are placed in the projection pathway splitting and directing the image onto two additional screens, now four in total. The screens are made of translucent material that shows images with equal intensity on both surfaces, front and rear. The result is eight vertically viewed large images, placed in an irregular pattern, which harmonizes with the exhibition space. The program comes in the form of a ten-minute repeating loop. Each of the two video laser disc players provides one video and two audio sources to the two projectors and four speakers. At the end of each cycle, a laser disk synchronizer aligns the two video players for a repeat performance.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See floor plan and entrance diagrams.)

NOTE: all the tech equipment, except the two projectors and mirrors and the screens, should be located outside the exhibition space, in a small adjacent tech area.

EQUIPMENT

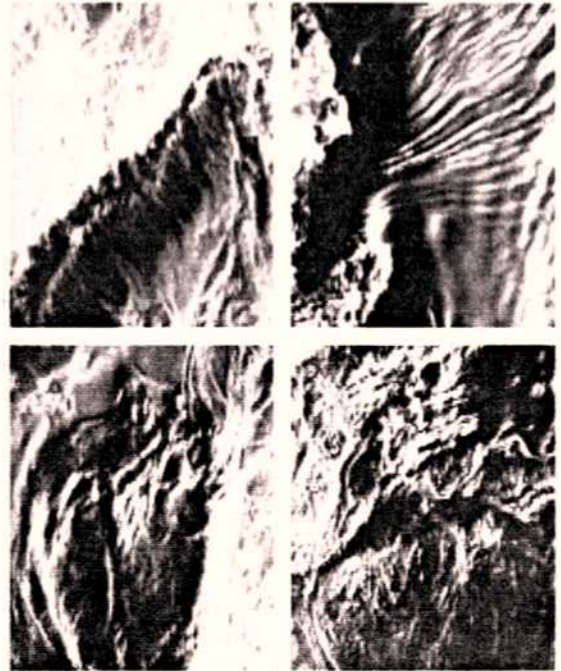
The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 2 video projectors
- 2 projector stands with mirror assembly attachment
- 2 Pioneer Video Laser Disk Players, LD-V Series
- 2 program video laser disks NTSC, color
- 2 beam splitters in frame assemblies
- 1 two-channel synchronizer
- 4 translucent screens in frame or with hanging harnesses
- 2 stereo audio amplifiers (4 audio channels)
- 4 speakers
- 4 speakers stands or wall mounts
- 1 four-level equipment stand (rack)
- 2 video cables (long)
- 2 pairs of stereo cables (short)
- 4 speaker cables (long)
- 7 power outlets

NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing.

SCREENS

The primary characteristic of the translucent screens is to show the image in equal intensity front or rear. They are either hung from the ceiling or placed on the floor in self-standing frame assemblies, arranged in a semi-random pattern, avoiding explicit symmetry or parallel positioning. As there is no singular point of view, the environment must be constructed for the audience to feel encouraged to enter the room, walk around, cast their shadows on the screens or sit down.



MIRRORS AND PROJECTORS

The mirrors are in fact 50% beam splitters dividing the direct and the deflected light/image from a single projector in equal amounts to the two screens. They are a custom-made assemblies that attach to the projector stands. The positioning of the mirrors is critical and requires some knowledge of optics. The mirrors can deflect the secondary beam anywhere from 30 to 120 degrees, but a positioning close to 90 degrees is most efficient.

There are two classes of video projectors available: single lens, or three lens projectors. It is possible to use four projectors instead of two, avoiding the complications of the split-mirror alignment altogether.

NOTE: The three lens projectors require professional alignment and a larger-size beam-splitter assembly. The throw distance and the size of screens varies also, but the projectors must be able to deliver sufficient amount of light/image.

PROJECTOR STANDS

The construction of the projector stand depends on the type, shape, and weight of the projector. It is essential that the single or center lens of the projector is on the level with the center of the screen (see drawing). The stand must be constructed to hold the projector on its side, presenting the image vertically. The beam splitter (mirror) assembly must be securely mounted on the platform (squared to the base of the projector) at exactly 90 degrees to the platform. Place the projectors according to the drawing and measure the throw distance (single lens projectors often have a zoom feature) versus the size of the screen as mentioned above.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up disk players and synchronizer. Then, turn the projectors on (verify pilot light). Wait a short while to verify that the installation is starting synchronously. If not, turn power off and on again for the Players and synchronizer, NOT THE PROJECTOR. If problem persists notify Steina by phone, fax, or e-mail.

TO SHUT DOWN: Turn the power on the projectors off locally (the fan will keep going until the units have sufficiently cooled down). After the fans stop, turn off power distributors for the projectors, disk players, and synchronizer. **ATTENTION:** the projectors may only be turned off by the power switch on the units and never by pulling the cable out, as the unit needs to be cooled down (about one minute) by the internal fan.

MAINTENANCE: The projection lenses and the mirrors need to be cleaned with a soft cloth at least once a week.

POWER REQUIREMENTS

(depending on equipment used)

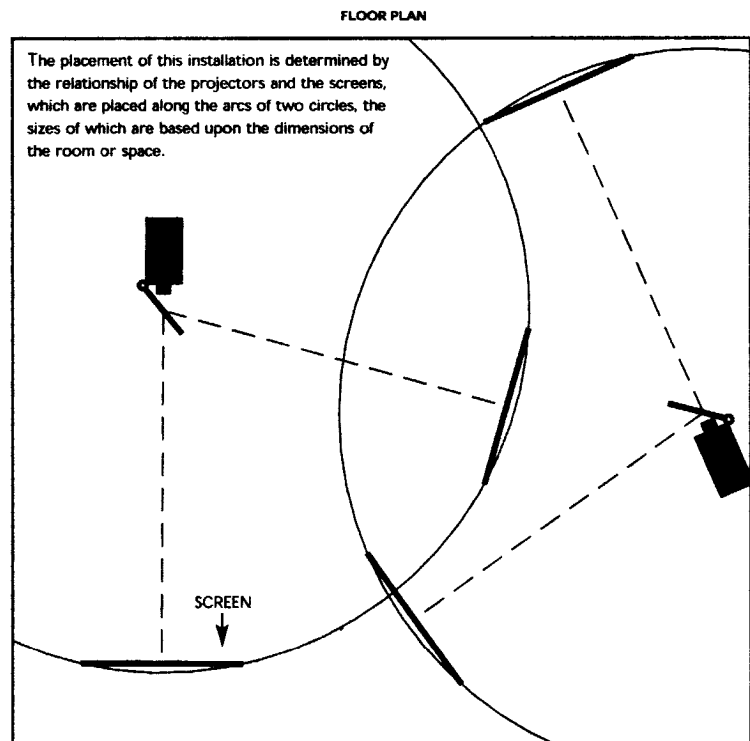
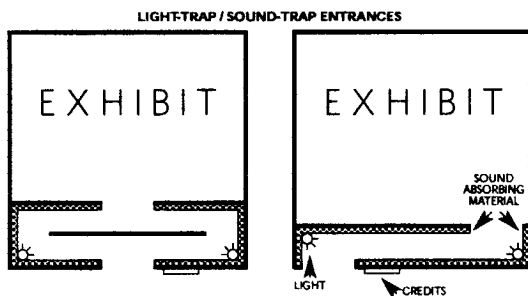
Video projectors:	Sharp XG-2000U	230 watts
	Sharp XV- P10U	175 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts
Outside USA, use a Power Transformer 220 to 110, 1000w.		

SHIPPING INFORMATION

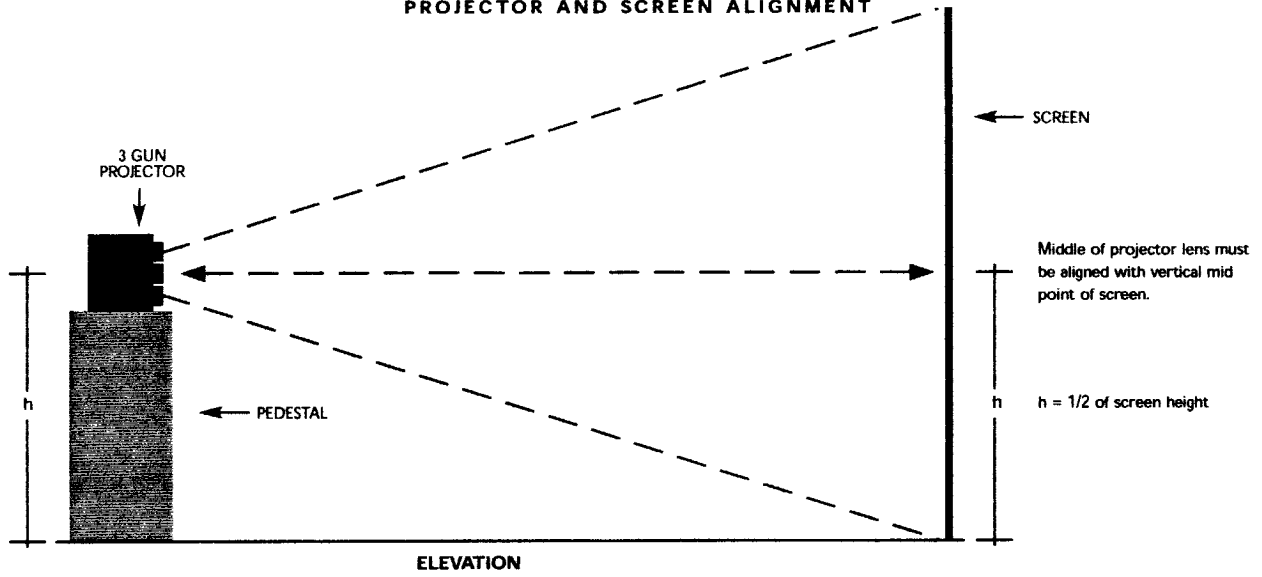
Installation is shipped in 3 crates. Weight and dimensions available upon request.

Shipped to and from:

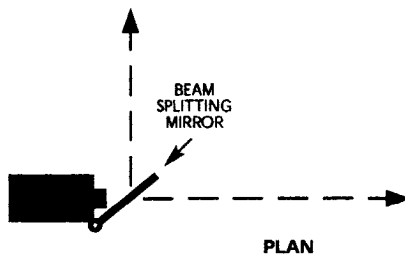
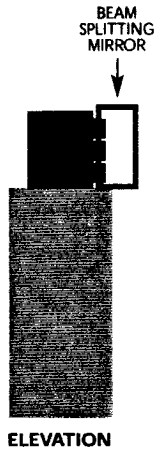
Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu



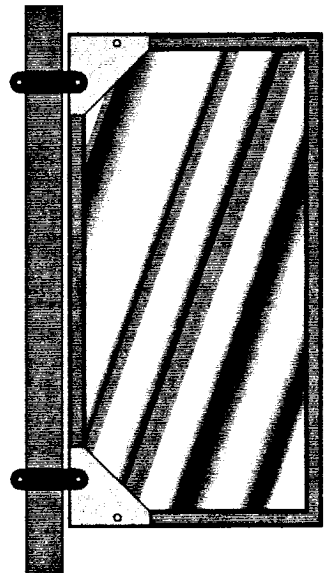
PROJECTOR AND SCREEN ALIGNMENT



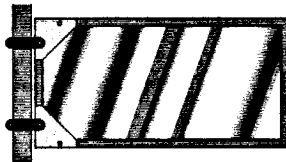
PROJECTOR WITH BEAM SPLITTER



BEAM SPLITTING MIRROR FOR THREE-GUN PROJECTOR



BEAM SPLITTING MIRROR FOR ONE-GUN PROJECTOR



PYROGLYPHS 1994

A VIDEO MATRIX INSTALLATION BY STEINA

IN COLLABORATION WITH TOM JOYCE

The initial inspiration for *Pyroglyphs* was the ancient art of blacksmithing but it soon became a musical treatise . . . In Steina's words: "In 1994 I spent long hours with blacksmith Tom Joyce, videotaping the process of building an iron gate. I found iron gates a little too concrete, so I closed in on the intense and violent nature of materials being manipulated by torches, files, and anvils—the rapid flicker of flames. . . . Tom and I share a fascination with fire — as a phenomenon and as a medium that transforms other materials . . . as a medium of transmutation."

Steina videotaped, mostly in closeup, the activities of blacksmithing (hammering, filing, welding, manipulating fire), the phenomenology of fire (flames, sparks, combustions, glowing metals), and various improvised scenes — a vise crushing a timber, a stack of books burning, paper and wood being scorched.

Editing this material into three complementary image tracks was relatively easy (the visuals were similar or dissimilar in compatible ways) but the sounds of those images were often too similar or too strident, competing for attention. So the sounds determined the editing. Steina processed them through digital

*devices like harmonizers, which couldn't turn the random noises into harmonics but produced interesting sounds anyway; pitch shifters that move a sound to the octave immediately above or below; and reverb circuits to create echo effects. The sounds and rhythms are rendered *allegro con brio*, *pianoforte*, or *pianissimo*: there is a lot of percussive hammering, say, then all is quiet and we hear only crackling flame or the hollow whisper of the blowtorch. . . .*

PYROGLYPHS is a spectacular meditation on fire. Steina has created a sublime landscape illuminated by the many-hued glow of fevered metals and shows of sparkling scintilla. She makes us feel the hypnotic pull of lambent flames even as our breath is caught by the preemptive ignition of the torch, our hearts quickened by the violence of the forge.

— GENE YOUNGBLOOD, MEDIA THEORIST



DESCRIPTION

In *PYROGLYPHS*, fifteen (or eighteen) monitors are arranged in a circle on the floor facing up and inward at a 30 degree angle. The viewer stands outside this circle looking in.

Three channels of video program recorded on laser disk players provide one video and two audio sources each routed to a circle of video monitors with internal speakers (see drawing for assignment). The laser disk players are aligned by a synchronizer for synchronous playback. Each player at the end of its twenty-minute cycle automatically returns and re-synchronizes for a continuous performance.

THE SPACE

The minimum active space required is 7.5 meters by 7.5 meters by 3.5 meters high, or, 25 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See floor plan and entrance diagrams.)

NOTE: The tech equipment except the monitors and speakers should be located outside the exhibition space in a small adjacent tech area.

E Q U I P M E N T

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 15 or 18 matching video monitors
- 3 Pioneer Video Laser Disk Players, LD-V Series
- 3 program video laser disks NTSC, color
- 1 three channel synchronizer
- 3 stereo audio amplifiers (6 audio channels)
- 6 speakers (internal speakers of superior quality may be used)
- 6 speakers stands or wall mounts
- 15 video cables
- 3 pairs of stereo cables
- 4 speaker cables
- 22 power outlets
- 1 circular rug (optional)

NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing

M O N I T O R S

The fifteen (or eighteen) monitors must be matching in size and manufacture. They are placed on the floor in a circle facing inward without spacing in between, tilted about 30 degrees upwards. Some monitor models are designed to make this easy; with others, wedges must be built to be put under the monitors to tilt them upwards from the floor. These wedges must be custom-made (one for each) to fit the size and shape of the monitors.

V I D E O M A T R I X A S S E M B L Y A N D W I R I N G

Place a circular rug (provided along with the other installation equipment) in the middle of the room. The rug provides a convenient way to establish a center around which the monitors can be placed in an approximate circle. An alternate method is to draw an erasable circle on the floor.

First connect the players to the monitors (see drawings). Channel one connects to the first on the line, skips the next two, connecting to the fourth, seventh, etc. Channel two connects to the second, fifth, eighth monitors, etc. Channel three connects to the third, sixth, ninth, etc., monitors in the circle. If the monitor speakers are of very good quality, the audio can be chained the same way as the video (six discreet audio channels), so the sound emanates from each monitor in equal intensity.

After verifying that all audio and video cabling is working, lift the front of each monitor one-by-one about 30 degrees up to place the pre-fabricated wedges underneath. Now push the monitors toward the middle, an equal distance from the edge of the rug, so that the front edges of the monitors touch. Once the circle is perfect, all the cables should be tucked under the monitors and tied down. Finally, remove the rug or erase the drawn circle.

A U D I O W I R I N G

Connect the two stereo cables from each player to the three amplifiers, and the six speaker cables to the speakers. The speakers should be hung on the walls at equal distances.

S O U N D A N D I M A G E A D J U S T M E N T

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.

DAILY OPERATIONS

TO START: Power up the monitors, disk players, and synchronizer. Wait a short while to verify that the installation is starting synchronously. If not, turn power off and on again for the players and synchronizer. If problem persists, notify Steina by phone, fax, or e-mail.

TO 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 REQUIREMENTS

(depending on equipment used)

Video monitors:	Sony PVM 1910	120 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

NOTE: Outside USA, use a Power Transformer 220 to 110, 1000w.

CREDITS

At the entrance to the installation these credits should appear:
 "Pyroglyphs by Steina in close collaboration with Tom Joyce."

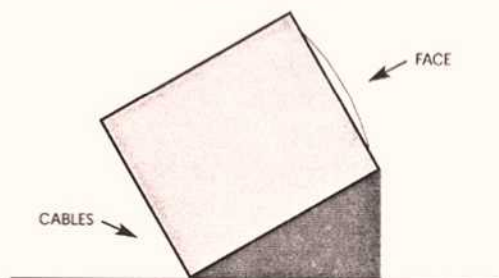
SHIPPING INFORMATION

Installation is shipped in one crate. Weight and dimensions available upon request.

Shipped to and from:

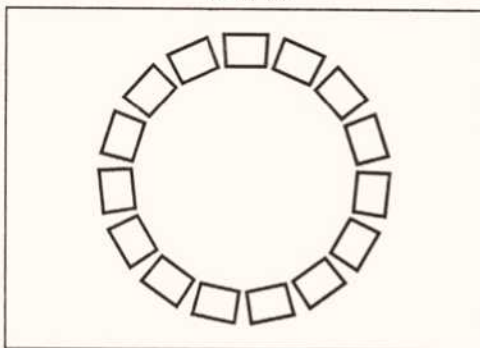
Steina and Woody Vasulka
 Route 6, Box 100
 Santa Fe, New Mexico 87501
 ph: 505-424-8786
 fx: 505-473-0614
 email: woodyv@santafe.edu

DIAGRAM OF WEDGE

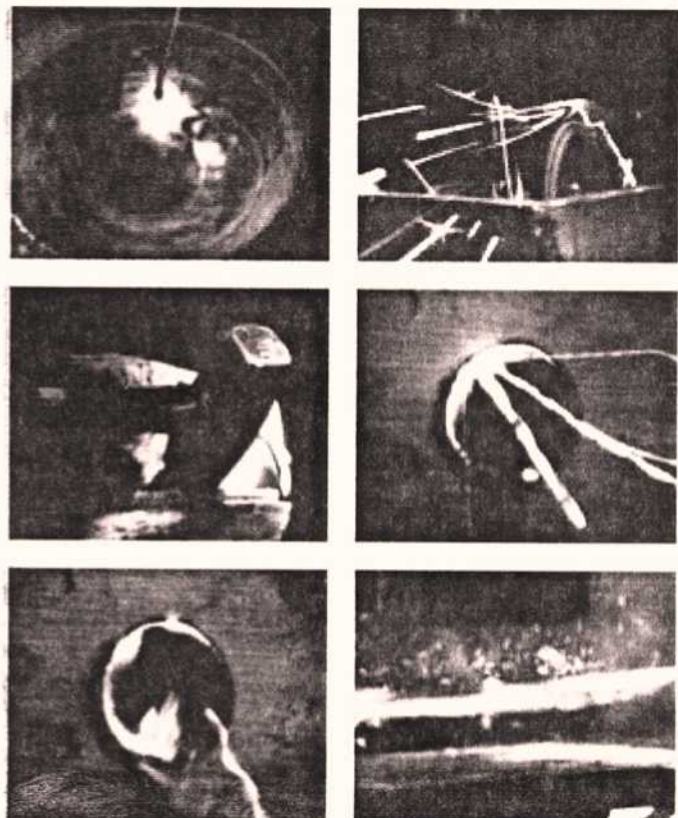
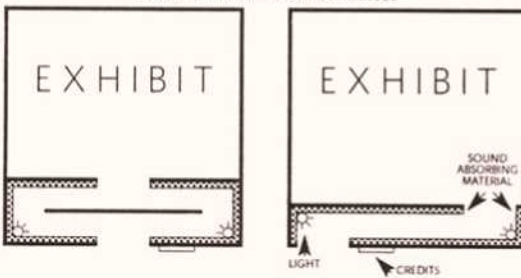


Lift front and slip wedge underneath.

FLOOR PLAN



LIGHT-TRAP / SOUND-TRAP ENTRANCES

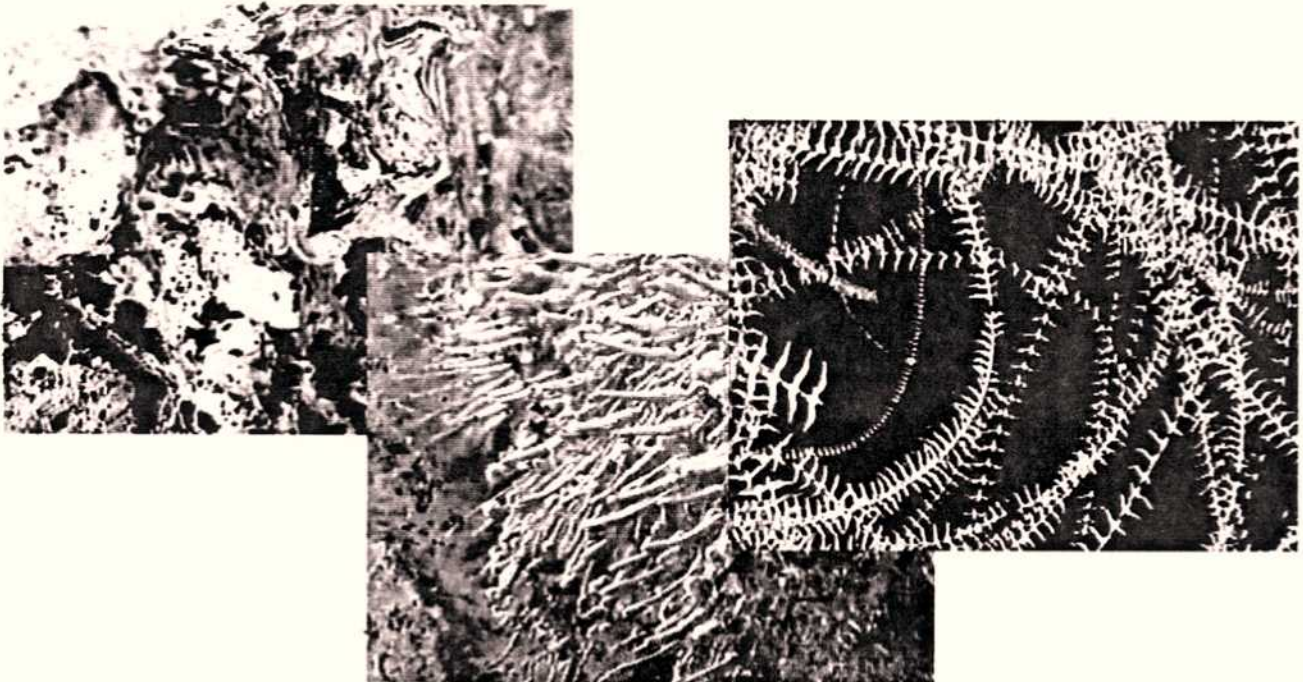


ORKA 1997

A PROJECTED VIDEO ENVIRONMENT BY STEINA

STEINA: "My background is in music. For me, it is the sound that leads me into the image. Every image has its own sound and in it I attempt to capture something flowing and living. I apply the same principle to art as to playing the violin: with the same attitude of continuous practice, the same concept of composition.

"Since my art schooling was in music, I do not think of images as stills, but always as motion. My video images primarily hinge upon an undefined sense of time with no earth gravity. It is like a duty to show what cannot be seen except with the eye of media: water flowing uphill or sideways, upside down rolling seas or a weather beaten drop of a glacier melt. "The idea is that perhaps the audience could feel a part of this creative trance, living for a moment in a mental world where they have never been."



DESCRIPTION

In ORKA, a three-channel video environment, the three disk players provide one video and two audio sources to three projectors and six speakers. A video synchronizer aligns the three channels for synchronous playback. At the end of each fifteen-minute cycle, the program automatically returns and re-synchronizes for a repeat performance.

The images in ORKA — which means "life force" — were shot by Steina in the wilds of her native Iceland in 1996. A "tracer" device performs recording of the traces of the micro-movements of nature over time, such as the paths of birds and waves.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or, 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See entrance diagrams.)

NOTE: All the tech equipment, except the projectors and speakers, should be located outside the exhibition space in a small adjacent tech area.

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 3 self-standing screens
- 3 Pioneer Video Laser Disk Players, LD-V Series
- 3 program video laser disks NTSC, color
- 1 three-channel synchronizer
- 3 stereo audio amplifiers (6 audio channels)
- 1 six-channel audio mixer
- 3 stereo low-frequency filters
- 6 speakers
- 6 speaker wall mounts
- 6 speaker cables
- 1 subwoofer
- 3 pairs of stereo cables
- 3 pairs of RCA splitters
- 3 video cables
- 22 power outlets

NOTE: The laser disk synchronizer used by the Vasulkas is custom built and interfaces only with Pioneer Industrial Laser Disk Players (2200 to 8000 Series). It is not interchangeable with laser disk players from other manufacturers, such as Sony and Phillips, which require a commercially available synchronizing.

SCREENS AND PROJECTORS

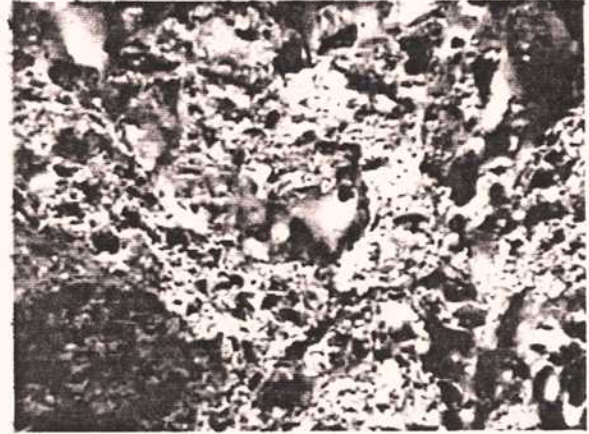
The position of the projectors and screens are seen in a diagram on page three. The primary characteristic of the translucent screens is to show the image in equal intensity front or rear. They are placed on the floor in self-standing frame assemblies, arranged in accordance with the diagram, avoiding explicit symmetry or parallel positioning. As there is no singular point of view, the environment must be constructed in such a way that the audience will feel encouraged to enter the room, walk around, cast their shadows on the screens or sit down.

AUDIO WIRING

Connect the two stereo cables from each player through the three low frequency filters to the amplifiers, and connect the six speaker cables to the speakers. Connect an additional audio from each player to the 6 channel audio mixer input and mono out to the subwoofer. The speakers should be hung on the walls at equal distances.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.



DAILY OPERATIONS

TO START: Power up Disk players and synchronizer. Then, turn the projectors on (verify pilot light). Wait a short while to verify that the installation is starting synchronously. If not, turn power off and on again for the players and synchronizer, NOT THE PROJECTOR. If problem persists, notify Steina by phone, fax, or e-mail.

TO SHUT DOWN: Turn the power on the projectors off locally (the fan will keep going until the units have sufficiently cooled down). After the fans stop, turn off power distributors for the projectors, disk players and synchronizer. **ATTENTION:** the projectors may only be turned off by the power switch on the units and never by pulling the cable out, as the unit needs to be cooled down (about one minute) by the internal fan.

MAINTENANCE: The projection lenses need to be cleaned with a soft cloth at least once a week.

POWER REQUIREMENTS

(depending on equipment used)

Video projectors:	Sharp XG-2000U	230 watts
	Sharp XV- P10U	175 watts
Stereo amplifiers:		150 watts
Video disk players:	Pioneer 2200	70 watts
	Pioneer 8000	100 watts
Synchronizer:	Jericho Data Systems	40 watts

NOTE: Outside USA, use a Power Transformer 220 to 110, 1000w.

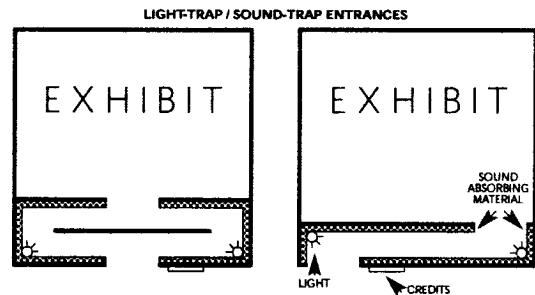
SHIPPING INFORMATION

Installation is shipped in 3 crates.

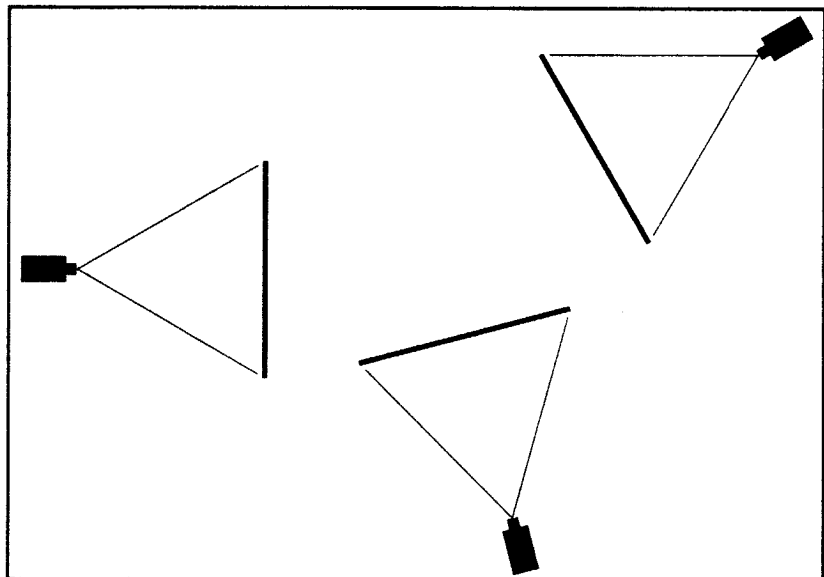
Weight and dimensions available upon request.

Shipped to and from:

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
email: woodyv@santafe.edu



FLOOR PLAN



Suggested floor plan subject to change according to the proportions of the exhibition space.

VIOLIN POWER

AN INTERACTIVE PERFORMANCE BY STEINA

STEINA: "In 1991, after having experimentally interfaced my acoustic violin with a variable speed video cassette player, I bought a MIDI violin and a Pioneer Disk Player. Interfacing these instruments with a computer gave me an instant access to any frame of video on the disk as well as access to fast/slow and forward/backward movements. The initial software was written by Russ Gritzko and further developed and improved by Bill Heckel. VIOLIN POWER is a ongoing continuous project with an ever increasing 'repertoire.' So far I have made five videodisks and I change the program for every performance."



CONCEPT

The ZETA Violin is a five-stringed electric violin with a MIDI output. The assignment, at the moment, is that stops on A and E string point to frame locations on the disk. The D and G strings control speed and direction and the C string is a master controller assigned to address segments on the disks.

In another programming scheme, the C string controls which upper strings get assigned their function, as Steina experiments to make the performance more musically interesting.

DEMO TAPE

The demo tape is of various live performances in the USA and Europe. The image material on the disks is mostly Steina's, some in collaboration with Woody Vasulka.

EQUIPMENT SUPPLIED BY STEINA

Zeta midi violin, Model ZETA VC-225
IVL Technologies ZETA MIDI Controller, model PR 7005
IVL foot switch, Model MSF-40
Digitech Harmony Processor, DHP-55
Lexicon LXP-5 Unit with a foot switch
Video Laser Disc player, Pioneer VLD-8000
Program 12 inch laser disk
AST laptop computer, M 501207-101
PC Music Maker Model HRS 3000
7 120 vac outlets

EQUIPMENT SUPPLIED BY HOST

video projector
sound mixer
amplifier
speakers
a narrow-beam spotlight

INFORMATION

Steina and Woody Vasulka
Route 6, Box 100
Santa Fe, New Mexico 87501
ph: 505-424-8786
fx: 505-473-0614
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MATRIX I & II 1970-72

VIDEO MATRIX INSTALLATIONS

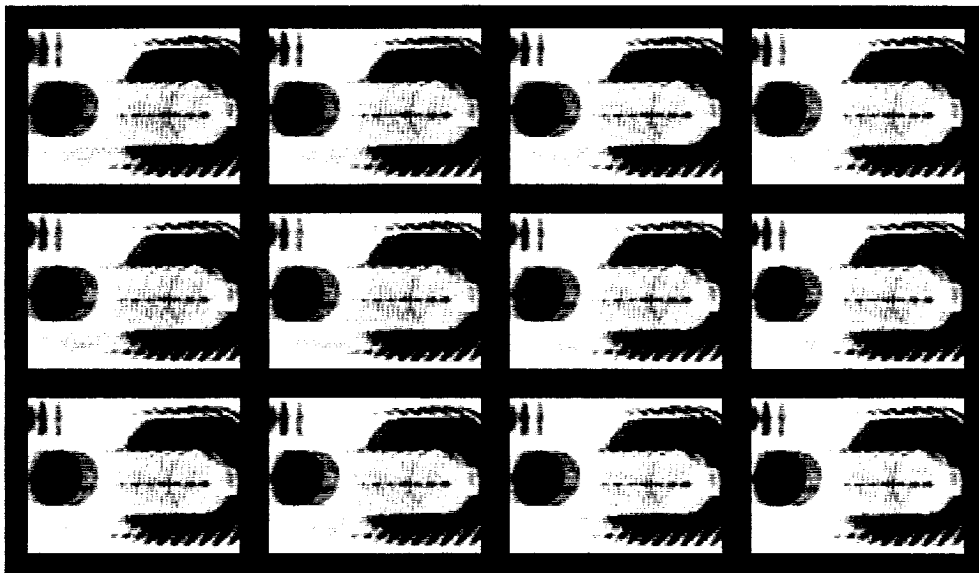
BY STEINA AND WOODY VASULKA

In these matrixes, the Vasulkas reduce images and the sounds to their bare essentials in order to examine the essence of the electronic image and sound — the signal. As phenomenological exercises on the construction of electronic image and sound, this series is also a playful study of movement, in which abstract forms travel across multiple screens to symbolize the kinetics of electronic signals.

— MARITA STURKEN, WRITER AND CURATOR

MATRIX examines pure motion and process, emphasizing the way in which the single video image can be expanded exponentially to fill a multi-monitor picture field. The pulse of the signal, revealed as visual and audio correlatives, passes in sweeping gestures across the field of monitors to create, in effect, a large-scale figuration of the scanning mechanism of video itself.

— ROBERT RILEY, CURATOR OF MEDIA ARTS, SAN FRANCISCO MUSEUM OF MODERN ART



DESCRIPTION

MATRIX I is a one video, one audio channel, black and white video monitor matrix on a thirty minute repeating program. A video disk player provides a video and audio source to 16 video monitors and two speakers. At the end of each cycle the program automatically returns and re-synchronizes for a repeat performance.

MATRIX II is a one video, one audio channel, color video monitor matrix on a twenty minute repeating program. A video disk player provides a video and audio source to 12 video monitors and two speakers. At the end of each cycle the program automatically returns and re-synchronizes for a repeat performance.

THE SPACE

The minimum active space required is 10 meters by 7.5 meters by 3.5 meters high, or 35 feet by 25 feet by 12 feet high. The major consideration in terms of space is the total avoidance of ambient light. The space should be painted a non-reflective black and no light source should exist, other than the one that emanates from monitors themselves. Also include a low bench seating four or five people. The entrance must be well insulated from light and sound. Most ideal is a double trap door with sound insulating material. (See entrance diagrams.)

EQUIPMENT

The Vasulkas can provide all the equipment listed below, or share resources with the exhibitor. This will be reflected in both shipping and equipment budgets.

- 16 stackable matching video monitors
- 1 video laser disk player
- 1 program video laser disk, NTSC
- 1 stereo audio amplifier
- 2 speakers (internal speakers of superior quality may be used)
- 2 speakers stands or wall mounts
- 16 video cables approx. 3 feet (1 meter) long each
- 1 pair of stereo cables
- 2 speaker cables
- 18 power outlets

MONITORS

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.

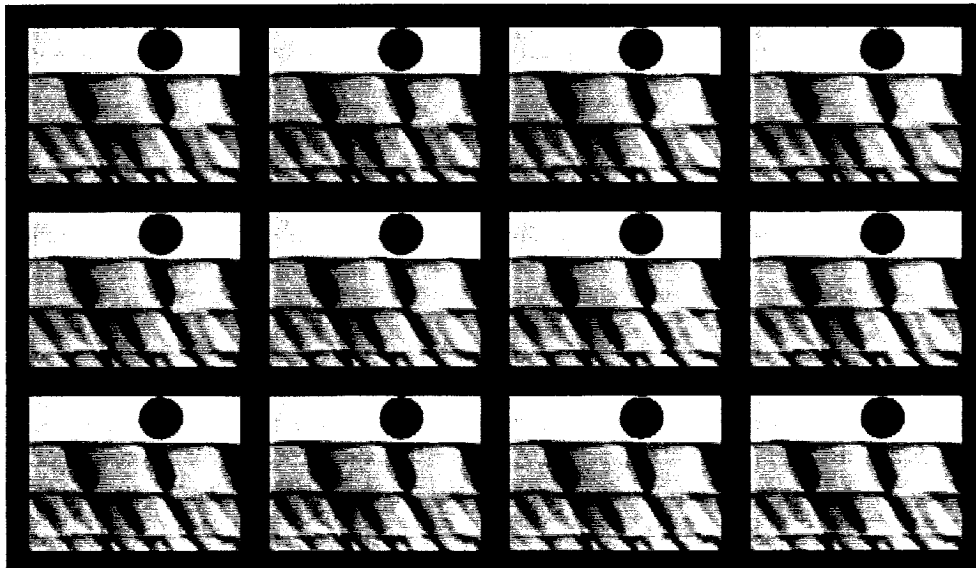
The terminators must be open except for the last monitor.

AUDIO WIRING

If the monitor speakers are of superior quality, the audio can be chained the same way as the video, the volume tuned so the sound emanates from each monitor in equal intensity. Alternate: Connect the two mono cable from the player to an amplifier, and the two speaker cables to the speakers. The speakers should be hung on the walls one on each side of the matrix.

SOUND AND IMAGE ADJUSTMENT

Treble should be normal and bass at maximum. All 75 ohm terminators located on the back of the monitors must be switched to open, except for the last monitor on each chain. Contrast should be high and brightness below middle. The basic rule here is to set up the proper deep color black as a reference to the maximum contrast and brightness. With that, the other components (hue, color saturation) can be assigned. The persons installing the environment must use their esthetic judgment as to the proper monitor settings for maximum visual impact.



DAILY OPERATIONS

START UP: Power up monitors and disk player. Verify that the installation is starting up. 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 and disk player.

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

POWER REQUIREMENTS

(depending on equipment used)

Video monitors: Sony PVM 1910 120 watts

Stereo Amplifiers: 150 watts

Video Disk Players: Pioneer 2200 70 watts

Pioneer 8000 100 watts

Outside USA, use a Power Transformer 220 to 110, 1000w.

SHIPPING INFORMATION

Installation is shipped in one crate. Weight and dimensions available upon request.

Shipped to and from:

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Route 6, Box 100
Santa Fe, New Mexico 87501
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email: woodyv@santafe.edu

