Steina



closed-circuit video installation color, silent 2 video cameras, 4 video monitors, mirrored sphere, turntable assembly This work was consistented by Woody Vasulka.

In the mid-1970s, Steina began "Machine Vision," a series of works that investigate the nature of seeing through the use of mechanical devices. The artworks of "Machine Vision" use semi-autonomous machines both to reconfigure space and to examine aspects of human and machine perception. The rotating camera of *Allvision* records the external space that is reflected in a mirrored sphere, transforming how we perceive the surroundings spatially and electronically. Steina refers to the *Allvision* globe and video diptych as a means to move beyond the limitations of human vision to a more expansive view. In its interactive and playful form, *Allvision* emphasizes the pleasure of the technology's mechanical vision and the exuberance of new ways of seeing.

# Allvision \_ 1976 An Electro/Opto/Mechanical Installation

<sup>11</sup>The main concern in "Machine Vision", a group of Steina's early installations, is creating a camera view that moves well beyond the restrictions of the human eye. One of the first works of Steina's *Machine Vision* project, and central to it, *Allvision* is a rotating spherical device that mediates the viewer's experience of the viewing space.

Steina's concept of "allvision" involves exploring a way of seeing that is an all-encompassing: the all-seeing *mirror sphere* transcends spatial limits such as up/down, and inner/outer by situating the viewer within abstract electronic space. Allvision restructures the space of a room so that the viewer's

Anvision restructures the space of a room so that the viewer's position within that space is always mediated through the machine. As the cameras orbit the sphere, the viewer entering the installation is thus transposed via the mirrored sphere into the abstract image space of the monitors". \_ Marita Sturken

## Description:

The installation stands on a small cast aluminum frame which supports a rotating turntable, a crossbar, a mirror sphere, two cameras, two adjustable camera platforms, the driving mechanism for the rotation, a slip-ring assembly and a DC motor. The slip ring assembly provides as uninterrupted video signals from, and power to the cameras.

The crossbar is attached to the top of the platform. The mirror sphere is placed at the center of the crossbar. The two cameras on their adjustable platforms are positioned on each end of the crossbar, looking in at the sphere. The two camera video signals are then connected to the BNC connectors on the top of the platform, which connects them via the slip ring assembly to the two BNC connectors at the bottom of the platform, where they can be connected to one or more pairs of monitors (see drawing).

The power travels through the slip rings in the opposite direction: from the dc power supply to the connector at the bottom of the platform. The top of the platform has two dc connectors, one for each camera. The other dc supply is for the motor, driving the platform. [Test first if the video signal passes the slip ring

• assembly, then start the turntable. (relocate)]

The space:

This installation is meant to fit itself into various spaces, anything from an alcove to a walk bridge between two environments At the entrance these credits should appear:

Instrumentation by Josef Krames, Woody Vasulka and Bruce Hamilton

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

An Itemized Equipment List:

2 Video Cameras

2 Camera Housings

2 Adjustable Camera Stands

A Mirror Sphere

A Sphere Stand

A Crossbar

A Turntable Assembly (with Gears and DC Motor)

A Cast Alumin Turntable Platform

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

Video:

Connect the two cameras to the BNC connectors on the top of the turntable A and B. Connect the BNC connector on the bottom of the turntable (A and B) to the A and B pair of monitors.

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

### Power:

Connect the DC Power Supply for the turntable and the two cameras on a single AC box (three outlets) and all monitors on another box.

## 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, contrastin color and brightness. (Describe Photos). The dynamic addition to the environment are the viewers.

Allvision is a close circuit environment with no additional media on tape or disk. There is no audio present.

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

Platforms:

The installation rests on the stand 1 to 2 ft high (gallery support choice) strategically placed in the exhibit space (usually the center).

One for each of two (or four or eight monitors)

Specifications:

Power: Input 110 or 220 VAC 33W

Video: PAL/NTSC (Cameras/Monitors of a matching standard)

Block diagram: (See supplemental)

Daily Operations:

Start up:

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.

Shut down: Power down Monitors, and Turntable and Cameras

Maintenance:

The Mirror Sphere and 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
Video Cameras		-	10???? watts
Turntable			40???? watts

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

Shipping information:

Box 1: 2 Color Video Cameras, 2 Camera Housings, 2 Camera Stands

Box 2: A Mirror Sphere, A Sphere Stand

Box 3: Crossbar, Turntable Assembly (with Gears and DC Motor) Turntable Platform, DC Power Supply, 2 Lights and Light Stands, AC Box, all Cables.

Two (or more) large Monitors (25")

#### ALLVISION II (1976) Electro/opto/mechanical installation

#### Theme:

"Machine Vision is a group of installations concerned with creating a camera view that moves beyond the restrictions of the human eye. One of the first works of Steina's Machine Vision project, and central to it, Allvision is a rotating spherical device that mediates the viewer's experience of the viewing space. Steina's concept of "allvision" involves exploring a way of seeing that is an all-encompassing, machine-derived vision. In Allvision, the all-seeing mirror sphere transcends spatial limits such as up/down, and inner/outer by situating the viewer within abstract electronic space. Allvision restructures the space of a room so that the viewer's position within that space is always mediated through the machine. Through the reflective sphere, the cameras scan the space and re-map it. The image of the viewer entering the space of the installation is thus transposed via the mirrored sphere into the abstract image space of the monitors, a space in which they are seen in a rotating cycle by the camera mechanism." Marita Sturken

#### **Operation:**

Physical description:

The main components of the installation include a pair of color video Cameras, large mirror Sphere and a Crossbeam. The cameras are positioned on both ends of the crossbeam, looking at the sphere at the center. The crossbeam is placed on the top of a continually rotating platform letting the cameras orbit the sphere.

The installation stands on a small cast aluminum frame which supports rotating crossbar, the driving mechanism for the rotation, gears and a slip-ring Assembly and a DC Motor. The slip ring assembly provides an uninterrupted video signals and power connection to the cameras placed on this continuously rotating apparatus. A variable power supply provides DC Power to the turntable.

As a part of the Installation, the two camera video Signals are then further channeled into one or more pairs of monitors placed in the room.

#### The Display:

Monitors are caught here in the classical paradox of video between a need for a reasonably high illumination of the environment where cameras of the installation must operate and a need for relative darkness for the monitors to successfully reproduce images of the same space. The monitors should therefore not be exposed to direct light, in fact a specific effort must be made to isolate the image surface, barring direct light

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interaction with it. Additionally, 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.

#### Space requirement

Active Space (see drawing/floor plan Room #026) 3,8M x 4,9M (12'5" x 16' 1")

Video:

2 or 4 matching video monitors (color) [provided by Roma]

- 2 Color video cameras PAL [provided by Roma]
- 2 Camera housings [provided by Vasulkas]

2 adjustable Camera stands [provided by Vasulkas]

Installation notes:

Connect the two cameras to the BNC connectors on the top of the turntable A and B. Connect the BNC connector on the bottom of the turntable (A and B) to the A and B pair of monitors. In case of multiple pairs, the terminators must be open except for the last monitor on the chain.

#### Hardware

A Mirror sphere [provided by Vasulkas] A sphere stand [provided by Vasulkas]

Crossbar

Turntable assembly (with gears and DC motor) [provided by Vasulkas] Turntable platform [provided by Vasulkas] Variable DC power supply [provided by Vasulkas] 2 Lights and Light stands [provided by Roma] AC and Video cables [provided by Roma]

Space modifications, curtains, stands, platforms [provided by Roma]

#### Platforms:

The installation rests on the stand 1 to 2 ft high (gallery support choice) strategically placed in the exhibit space (usually the center). [provided by Roma]

#### Maintenance:

The surface of the sphere and monitor screens should be occasionally dusted off and orbital speed empirically readjusted if needed.

Exhibit Environment:

#### PRELIMINARY SPECIFICATIONS

Light, sound, arrangement in space and Installation Light and sound:

There is a great variety in chosing light condition around this installation. The space should be flooded in all directions either by artificial or natural light. It is important that an environment reflected in the sphere exhibits great variety of forms and architectural features, contrast in color and brightness. The dynamic addition to the environment are the viewers.

There is no acoustic input or output to the environment.

Power: Connect the DC Power Supply for the turntable and the two cameras on a single A.C. box (three outlets) and all monitors on another box.

Daily Operations:

Start up:

Turn switch on turntable A.C. box Turn switch for monitors Verify that the installation goes into motion and displays video on the monitors.

Shut down:

Power down monitors, and turntable

Trouble shooting:

- 1) repeat above procedure
- 2) check appropriate cable connection
- 3) panic and call the Vasulkas (call them anyhow)

#### Media

None, this installation is a simple dual close circuit arrangement. It could exist in other video standards depending on availability of the cameras (of a specific size, see drawings) monitors.

Shipping information:

Number of crates: To be determined dimensions, weight, kind, content etc

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ALLVISION

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by Steina 1976-83

Variations of Allvision showed at:

Cathredal Square, Buffalo, N.Y. 1976 Hallwalls, Buffalo, N.Y. 1976 Albright-Knox Gallery, Buffalo, N.Y. 1978 The Kitchen, N.Y., N.Y. 1979 Carnegie Art Museum, Pittsburgh, Pa, 1982

Concept: The ultimate surveilance piece. In this version, the 4 monitors are placed under the turntable, each facing in different direction, enabling the viewer to see Allvision and the monitors at the same time.

Software: Self-generating

Hardware: 2 B/W Cameras w/wide angel lenses Turntable with Power supply Mirror sphere

Variation: 2 Color cameras w/wide angel lenses 4 color monitors

### The installation's hardware:

- Special: 2 B/W (or Color) Cameras w/wide angel lenses, Turntable with Power supply, Mirror sphere
- Standard: 4 B/W (or Color) monitors

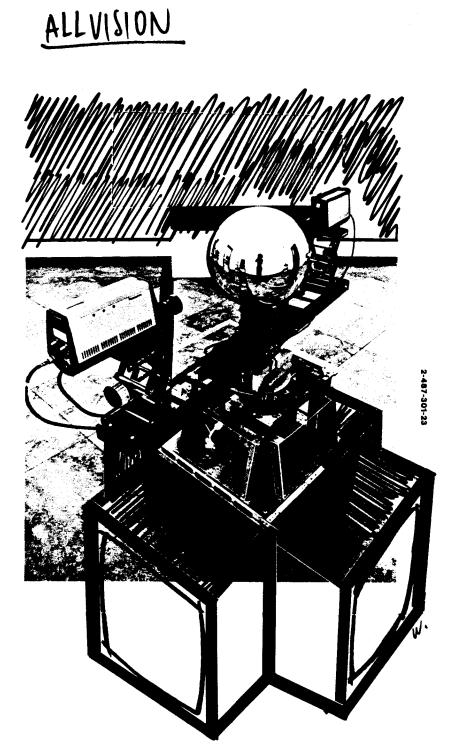
#### Electrical requirements:

One outlet (for turntable, 2 cameras and the 4 monitors)

Space: A square large room

In Santa Fe, 31-May-83

Steina & Woody Vasulka Rt. 6, Box 100 Santa Fe, N.M. 87501 Phone: 505-473-0614



2-467-301-22

The Vasułkas Route 6, Box 100 Santa Fe, NM 87591 505-473-0v14