

# Technical Rider

**Title:** Morphosis

**Year:** 2024

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**Full Description:** <http://sofianaudry.com/en/works/morphosis>

## Dimensions and Weights

#	Description	Dimensions (WxLxH)	Weight
1	Crate #1	30in x 20in x 23in (76cm x 51cm x 59cm)	~20kg
2	Crate #2	30in x 20in x 23in (76cm x 51cm x 59cm)	~20kg

## Conditions of presentation

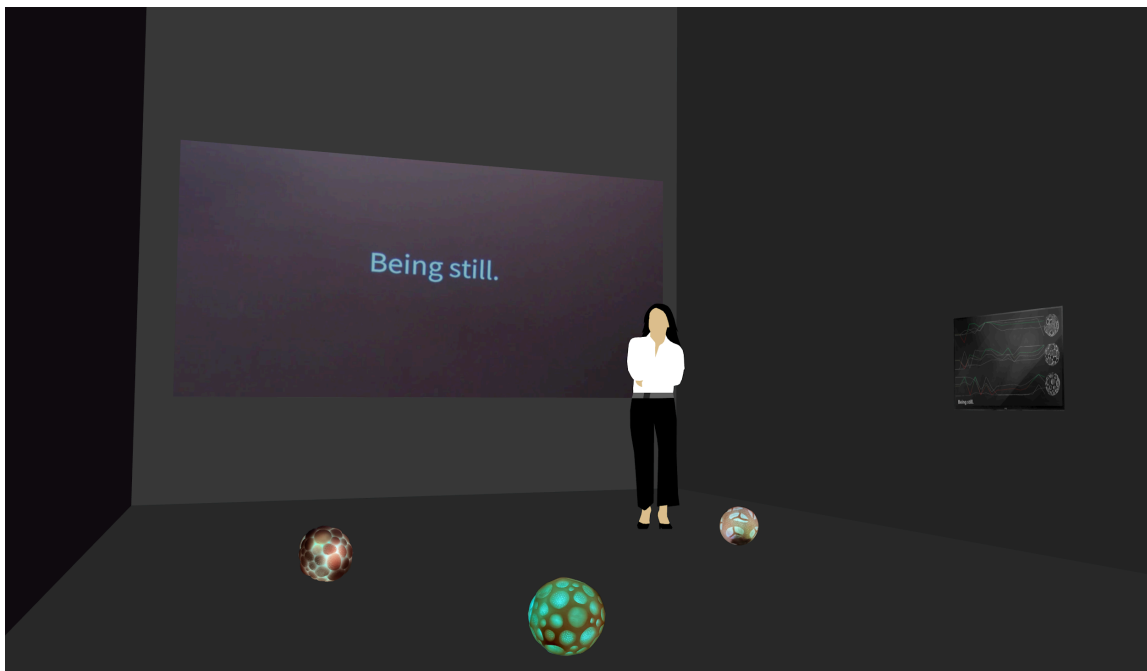
The installation needs to be contained in a space between 40 to 50m<sup>2</sup> (430 to 540 ft<sup>2</sup>).

The floor needs to be flat and levelled; it should be kept as clean as possible at all times.

The space needs to be fully enclosed in order to prevent the robots from leaving the space. Elevated containment barriers may thus need to be installed or built (to be discussed).

Two live video images will be displayed on a projector and/or TV monitor (to be discussed).

Example presentation setup:



## **Electricity**

Access to AC is required (120V, 50-60 Hz). Power consumption : 300 W. Recommended power source: 500 W.

## **Maintenance**

One or many trained staff members will take care of maintaining the installation, including:

1. Removing robots from the charge at the beginning of the day and starting the installation using a custom graphical user interface.
2. Perform regular monitoring of the robots through direct observation and using a custom graphical user interface.
3. Performing simple troubleshooting actions if a problem occurs, such as verifying power, rebooting computers and robots, etc.
4. Removing the robots from space and putting them back on the charge at the end of day.
5. Regularly cleaning the robots according to instructions.

Training and a detailed guide will be provided by the artists.

In case of a major failure in one of the robots, a spare robot is provided which can be used to replace the faulty robot. If this occurs, the artists will be communicating with the technical staff to guide them through the replacement operation.

## **Mediation**

The installation runs in two modes: idle and performance. In idle mode, the robots will be dimly lit and move slowly. In performance mode, they will run through a sequence of learning behavior running for about 15 to 20 minutes.

A schedule should be established for the performances (example: one performance every hour).

A trained staff member needs to be present to:

1. Gather visitors, guide them into the space, assisting people with special needs, and explain to them how to properly interact with the robots to avoid damage.
2. Once everyone is ready, launch the performance using the graphical user interface.
3. Supervise the session by responding to the audience's questions, ensuring audience members interact properly with the robots, and addressing any technical issues that may occur.
4. Bringing visitors out of the space.

The robots will automatically return to idle mode after the performance.

## **Installation**

One technical assistant chosen by the artists needs to be present for a period of three (3) full days (7 hours/day) to install the work and provide training to the staff. They need transportation, per diems, and honoraries for their work, to be discussed with the host.

## **Insurance**

The host shall cover the work for damage and theft up to the full replacement value (see below) for the entire period that the work is contracted by host, including transportation, set-up, event and dismantle.




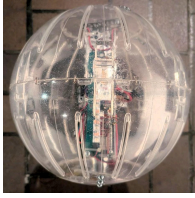


The host shall provide civil liability protecting the artist during the whole time of the venue including installing,

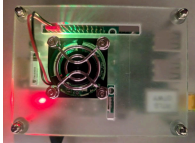





exhibition/performance and dismantling period. This coverage shall exempt the artists of any liability in case of any public or workers claims, accidents or injuries during the whole period. This insurance shall cover all the local workers assigned by the host and the work touring staff (if applicable).

## Value & Goods

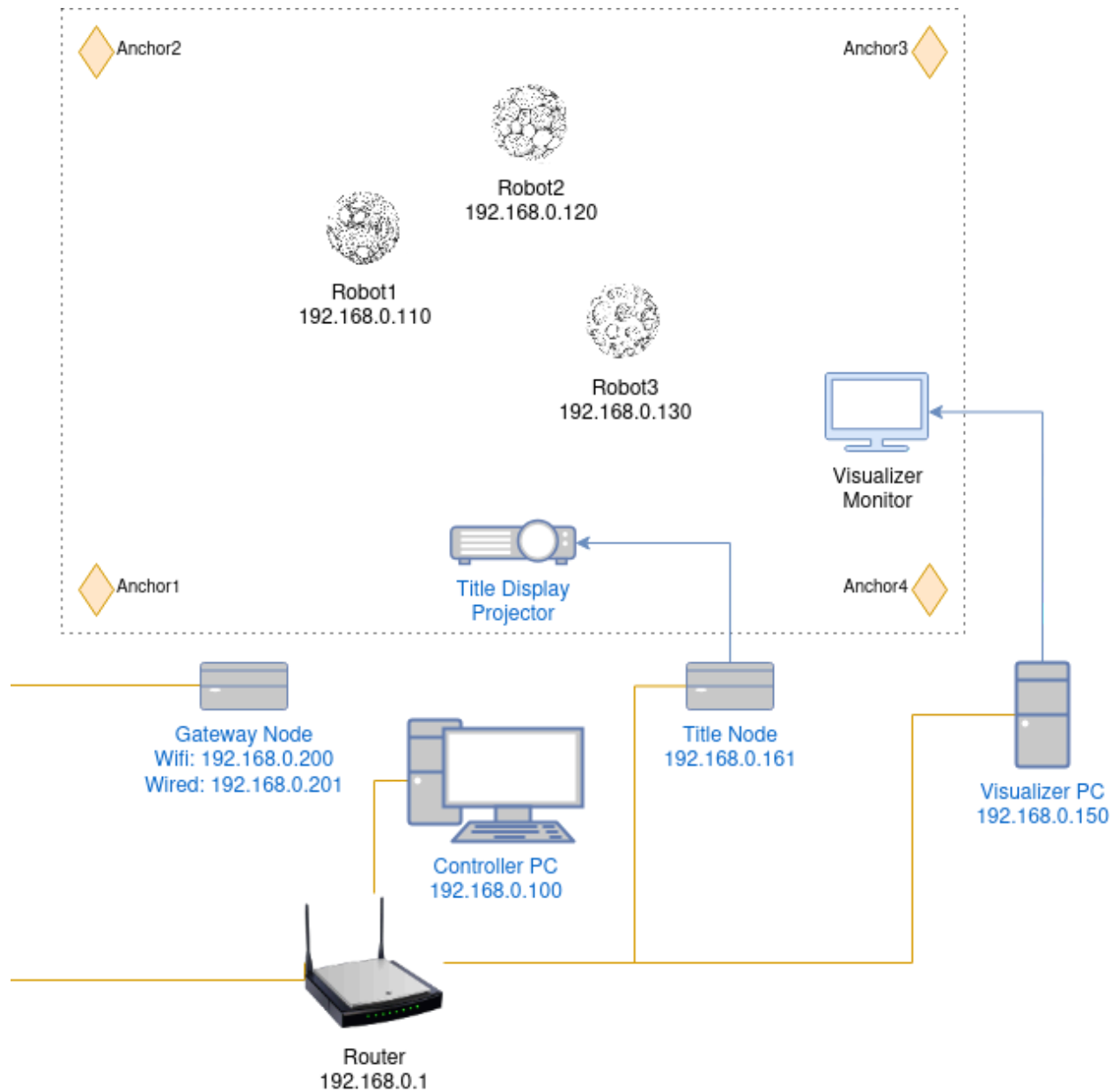
**Work market value:** 120,000 CAD

**Replacement value:** 35,000 CAD

#	Name	Image	Qty	CAD Value	Notes
1	Robot 1 (with skin)		1	7500	First robotic agent.
2	Robot 2 (with skin)		1	7500	Second robotic agent.
3	Robot 3 (with skin)		1	7500	Third robotic agent.
4	Spare robot		1	5000	Spare robot that can be used as a replacement for any of the three robots in case of major defect.
5	Controller PC		1	350	Integrates all information and controls robots. Provides graphical user interface to launch performances and monitor battery power and motor temperature.
6	Visualizer PC		1	350	Displays visualization of robots to be displayed on a monitor as part of the exhibition.

7	Gateway Node		1	200	Collects data from positioning anchors and robots to calculate the position of robots. Also acts as the MQTT broker to dispatch MQTT messages between the different machines (nodes, PCs, robots) across the local network.
8	Title Node		1	200	Displays a sequence of titles during each performance.
9	Router		1	100	Creates a local network and assigns IP addresses to each machine.
10	Positioning Anchors		6	550	Provide static reference positions for the positioning system.
11	Chargers		4	200	Used to recharge the robots.
12	Shipping Crates		2	1500	Used to carry/ship the goods.

## Technical Diagram



### Notes:

- Title Display Projector and Visualizer Monitor to be provided by the host. Type of equipment, resolution, luminosity, and placement to be discussed in order to adapt to the venue.
- Local network IP addresses provided for technical reference.