The Travels of Mariko Horo - Installation Requirements

My virtual reality installations are implemented in the Virtual Reality Modeling Language (VRML) and run off the hard drive of a fast Windows PC. They require the Bitmanagement Software VRML/X3D browser and a powerful graphics card. The user input device is a simple joystick that can be used easily by all but the most severely disabled. Sound is conveyed by 2 or more stereo speakers connected to the PC.

The image of the virtual environment is projected in real-time on a large 3x4 meter (or 9’ x 12’) screen or white wall. The center of the image (and thus the horizon line) should be roughly at eye height, with the bottom edge of the image only a couple of inches from the floor. This size and positioning is carefully chosen so that the image is life-sized and fits the users’ viewing perspective, thereby engages their kinesthetic senses and producing a strong sense of immersion without the expensive hardware of a CAVE or a head-mounted display. See the next page for detailed hardware and software requirements.

I will provide the following hardware and software:

- Code for the 3D interactive artwork
- 3D browser plugin and license
- Modified joystick in joystick box
I ask the venue to provide the following hardware and software:

**Room** should be **dark** and **completely enclosed on all 6 sides:**
- Entrance on rear side of space, so no light falls on screen.
- Walls extend to the ceiling, so no light leaks in between wall and ceiling.
- No other sources of sound nearby. (Soundtrack has large dynamic range. Quiet sections should be well audible and loud sections should not conflict with nearby artworks.)
- **Room dimensions:** 3.5m high x 5m wide x 8m deep (10' high x 15' wide x 24' deep.)

**Screen** (or white wall with a good surface):
- **Screen or projection surface:** 3m high by 4m wide (or 9.8’ high by 13’ wide)
- **Screen center:** 1.5m (or 5’) from floor (lower edge of screen almost touching floor!)

**Data projector** (takes computer input):
- Image resolution 1024x768
- **3500 ANSI lumens**, high contrast
- screen size of 5m diagonal (15’ or 180” diagonal)
- keystone distortion compensation
- ceiling mountable (or light enough to sit on shelf suspended from ceiling)
- long PC-projector cable to reach PC.

**PC hardware** (minimum requirements):
- Intel Core2 Duo, min.: 1.8 GHz processor / ideal: 2.66 GHz
- PCI-E bus
- Minimum 1 Gigabyte of system RAM
- Graphics card: min.: Nvidia GeForce 7950 GT; Ideally: Nvidia GeForce 8800 GT 512MB
- 500 Watt power supply (needed for graphic card)
- Sound card: ideally M-Audio Delta Audiophile 2496 or equivalent

**PC software** (minimum requirements):
- WindowsXP (Service Pack 2 or 3) or Windows Vista
- Internet Explorer Version 7+ browser
- DirectX 9.0c graphic drivers
- Windows Mediaplayer

**Active Stereo PC speakers:**
- Ideally Genelec 1029 APM 2-way active 40 Watt or equivalent.
- Speakers should be mounted to the right and left of screen, slightly in front of the joystick, so that sound can be relatively low, but still loud enough for users at the joystick.

**Joystick stand (per my drawings):** Wooden stand roughly 22.5cm square and 90cm high (8 7/8” x 35.5”), to hold joystick box, legs bolted to floor (or floor board) for stability.