

# 'Empty Rooms' Technical Rider

## Sound Equipment touring with U.S.O. Project

- **nr. 1 Turntable (plus phono preamplifier)**
- **nr. 4 iPods nano (plus custom docks)**
- **nr. 1 Sennheiser MKH 40-P48 microphone**
- **Digital Sound Processor:**
  - *nr. 1 Apple MacBook (A), driving **Symbolic Sound Corporation's Kyma** and the Pacarana Sound Computation Engine with a TC Electronic Konnekt24D (expanded via ADAT with a Behringer ADA8000)*
- **nr. 1 DV Camcorder**
- **Digital Video Processor**
  - *nr. 1 Apple MacBook (B), driving **Cycling '74's Jitter***

In Collaboration with [SMAP](http://www.smap.it)



## **Hardware requirements**

- **Transparent Projection Screen or Wall**
  
- **DLP Video Projector:**
  - *Brightness: 2,300 ANSI Lumens or greater*
  - *Contrast Ratio: 2,000:1 or higher*
  - *Pixel Density: 1280x720, 1920x1080*
  - *Inputs: **VGA***
  
- **FOH requirements**
  - *a **quad** playback system (left, right, left surround, right surround)*
  - *4 x speaker cabinets - 1 to 2 cabinets per corner of venue*
  - *1 to 2 x subwoofer cabinets - placed with front speakers*

*Sub-bass spectrum is bass-managed from both stereo output into any X-over in the PA-system: it is not a discrete .1 (LFE) channel.*

- **Mixing desk requirements**

- 8 input channels (mic/line) with 4 band parametric EQ (similar to [Mackie 1642-VLZ3](#))
  - input 1 < iPod 1 (unbalanced line - 1/4")
  - input 2 < iPod 2 (unbalanced line - 1/4")
  - input 3 < iPod 3 (unbalanced line - 1/4")
  - input 4 < iPod 4 (unbalanced line - 1/4")
  - input 5 | 6 | 7 | 8 (balanced line - 1/4") < *TC Electronic Konnekt24D*
- 4 Direct outs (Quad: Left, Right, LeftSurround, RightSurround)
  - *TC Electronic Konnekt24D* > out 1 | 2 | 3 | 4 (to amplifiers)
- 4 AUX sends (to Kyma)
  - aux 1 > iPod 1 to *TC Electronic Konnekt24D* input 1
  - aux 2 > iPod 2 to *TC Electronic Konnekt24D* input 2
  - aux 3 > iPod 3 to *TC Electronic Konnekt24D* input 3
  - aux 4 > iPod 4 to *TC Electronic Konnekt24D* input 4

## **Cockpit workspace**

Listed equipment is operating from a dedicated space on a table/desk to comfortably arrange all machinery.

All audio/video cables start from this place. A long VGA cable is needed to connect the MacBook (B) to the projector via Apple VGA Adapter.

### **Firewire, Ethernet and power cables are provided by the artists.**

Three (nr.3) **4.5m** FireWire Active Extension Cable + one (nr.1) FireWire Cable (6 Pin Male to 4 Pin Male) are available to connect the DV Camcorder to the MacBook (B).

Both laptops are connected via OSC (Open Sound Control) through an Ethernet switch.

The various signal sources have balanced signals with TRS and XLR outputs, but be prepared for the need of all kinds of adaptors, DI-boxes and voltage converter.

### **Kyma Inputs**

*TC Electronic Konnekt24D* < input 1 = turntable

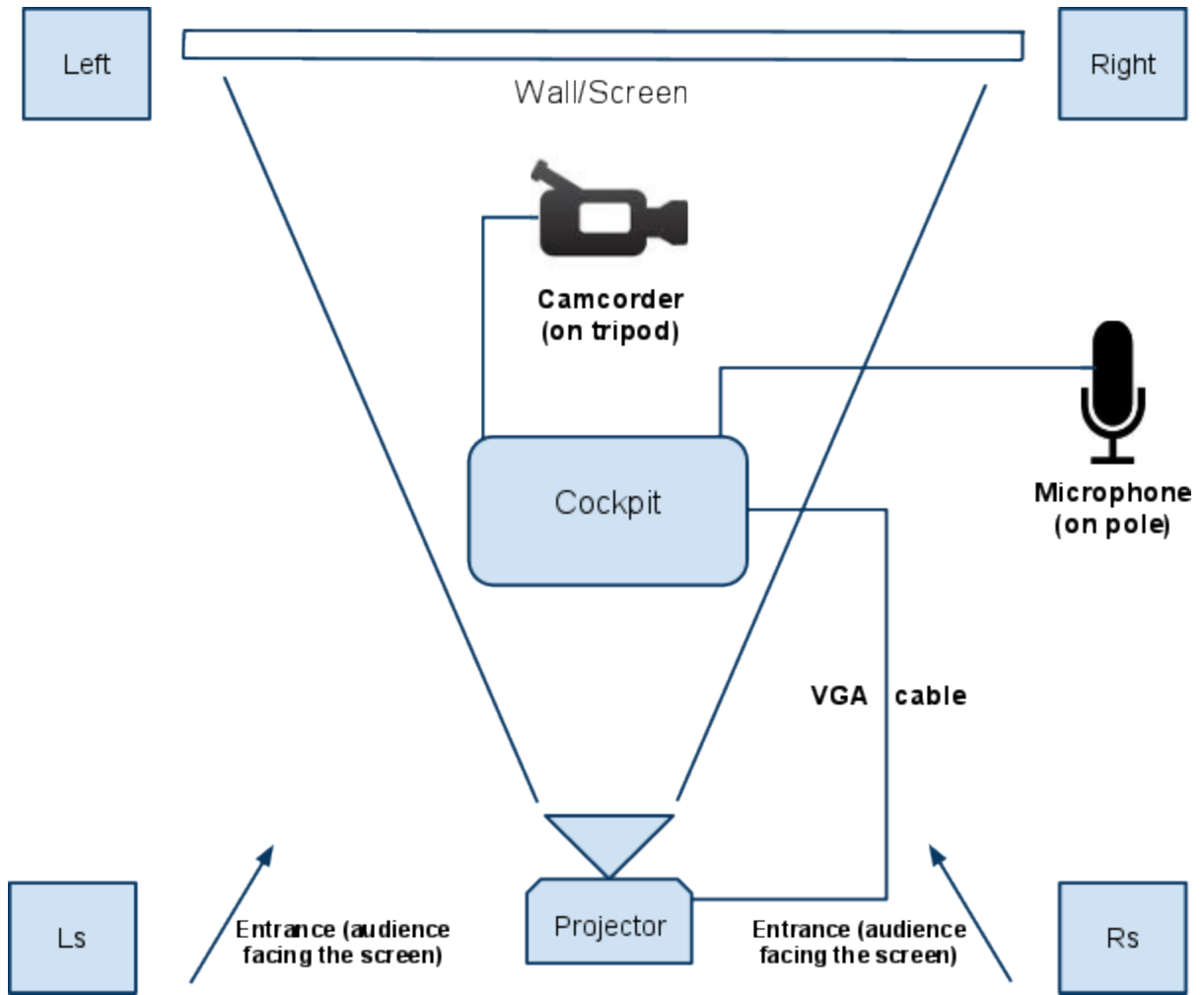
*TC Electronic Konnekt24D* < input 2 = microphone

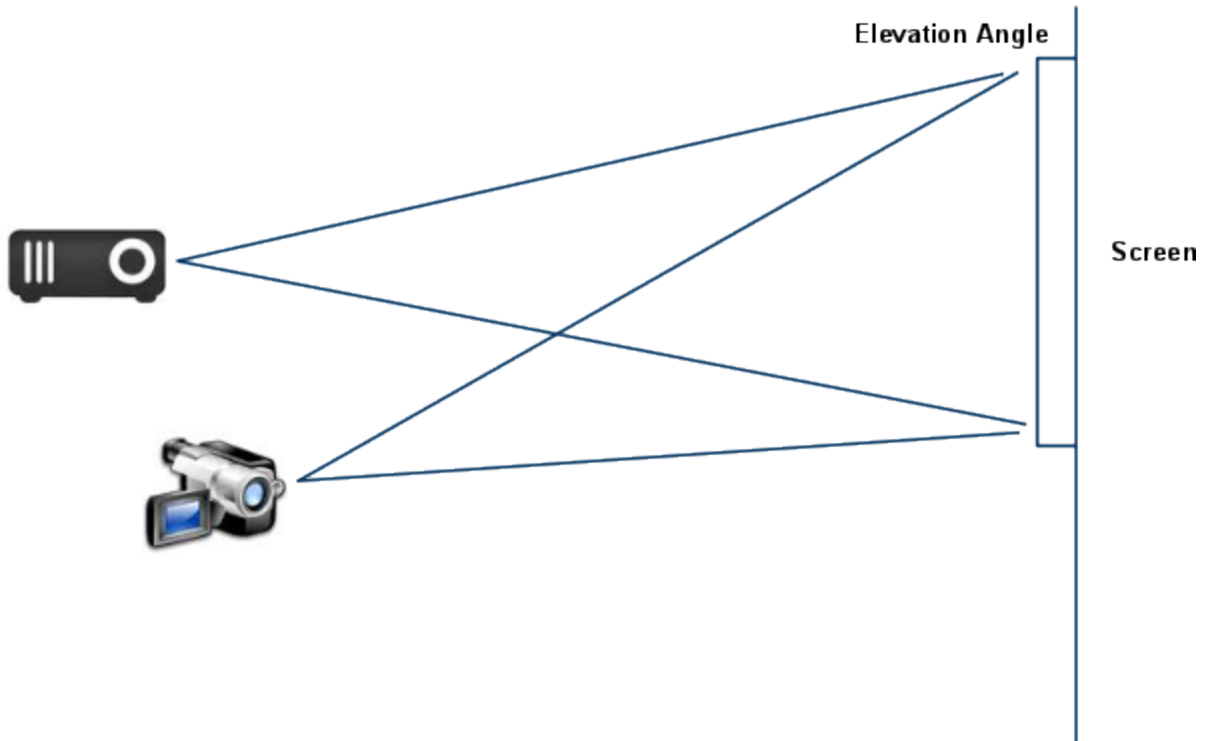
*TC Electronic Konnekt24D* < input 3 = iPod 1

*TC Electronic Konnekt24D* < input 4 = iPod 2

*TC Electronic Konnekt24D* < input 5 = iPod 3 (via ADAT in)

*TC Electronic Konnekt24D* < input 6 = iPod 4 (via ADAT in)





[www.usoproject.com](http://www.usoproject.com)  
[www.synesthesiarecordings.com](http://www.synesthesiarecordings.com)