



# How to build your application with EtherSound

## Connect 2 buildings

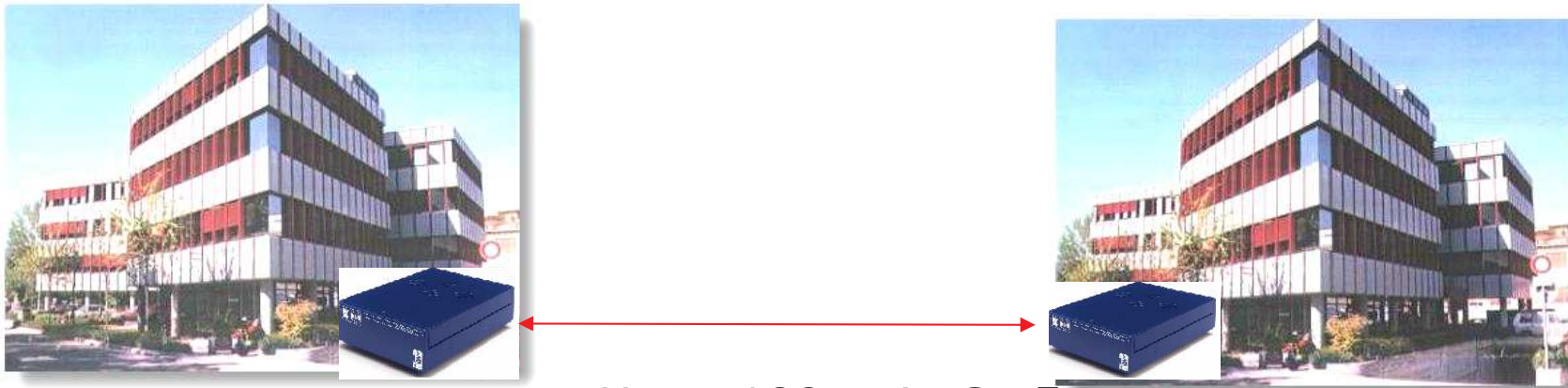
**You want to connect two buildings to transfer two channels:**

- from building A to building B,
- and from building B to building A,

**Just connect two ES220 (2 inputs and 2 outputs) with each other using either a Cat5 or a fiber optic cable**

*(Note : in the second case you will need a Cat5 - FO adapter).*

## Connect 2 buildings



Up to 100 m in Cat5

Up to 20 km in Fiber optic

**Ex: Georgia Radio Station**

## Connect 2 studios

**You want to connect two studios to transfer eight channels :**

- **from studio A to studio B,**
- **and from studio B to studio A,**

**Just connect two ES8in and two ES8out**

**Configure the channel routing by the rotary wheels  
(no need for a PC)**

## Connect 2 studios

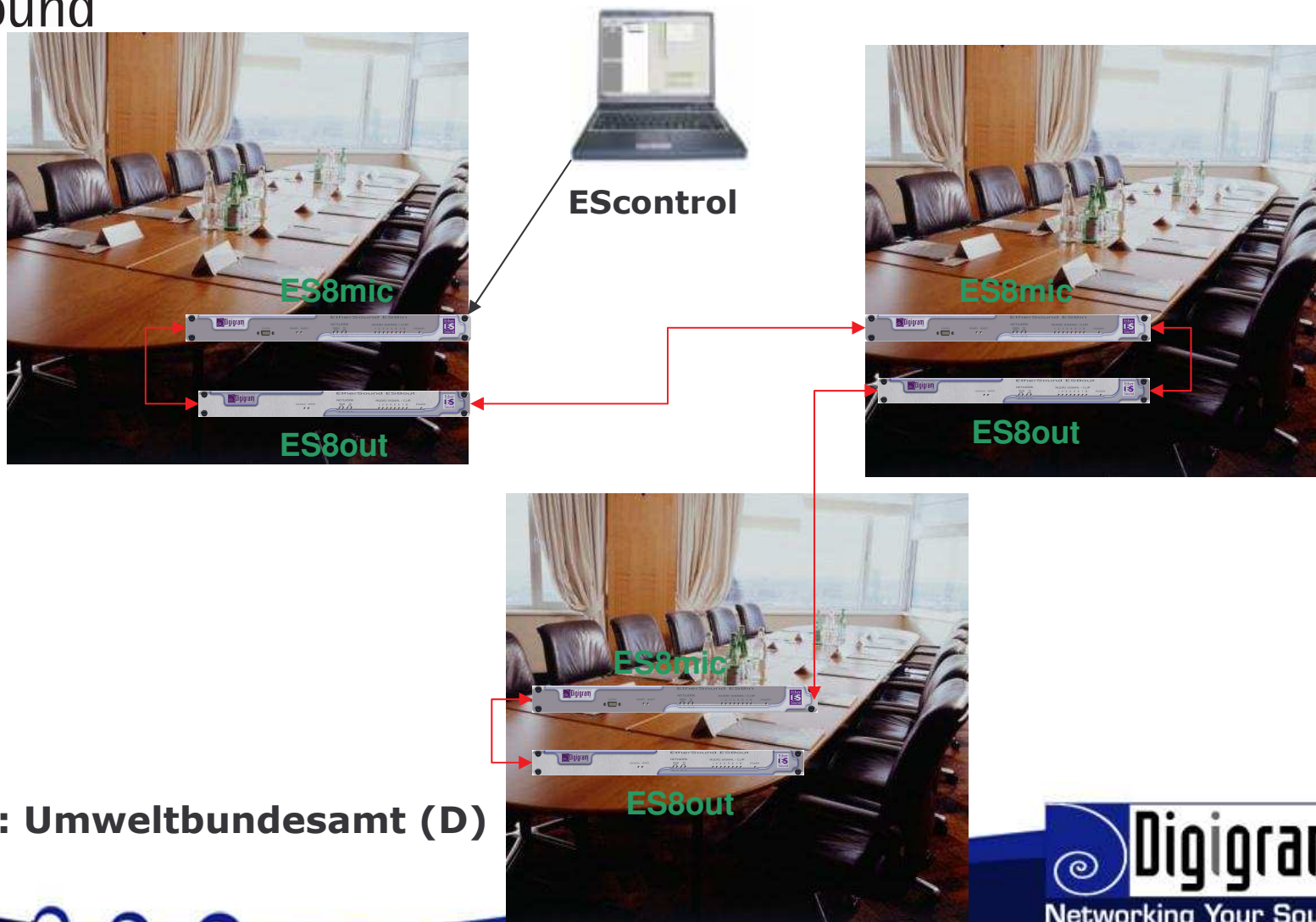


## Connect several rooms

**You want to connect several rooms using dynamic routing :**

- **Use EScontrol software to route the system or to download configurations**
- **Topology: daisy chain is preferable in order to set up a bi-directional network**

## Connect several rooms



Ex: Umweltbundesamt (D)

## Audio distribution

**You want to distribute your sound in different rooms.**

**You have one (or several) source(s) and many destinations.**

**Topology: star topology allows to benefit from a standard switch**

## Audio distribution





## Logging

**You want to record lots of channels.**

**With EtherSound, you have 64 channels on one cable.**

**If you need to record more than 64 channels, create two EtherSound networks.**



**With the miXart8 ES, you can record 8 channels.**

**With the future LX6464, you will be able to record 64 channels**

## For logging



Nodal



LX6464 or miXart 8 ES

## To connect several rooms with a nodal point (1/2)

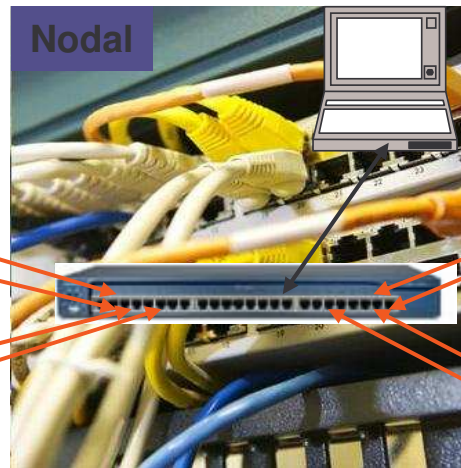
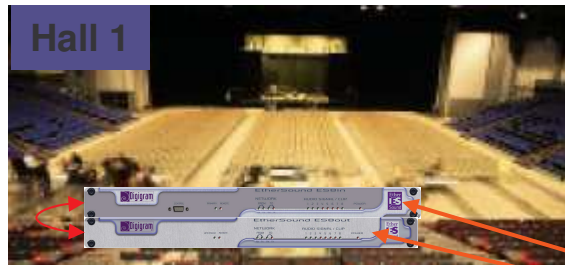
**In countless buildings the network infrastructure already exists.**

**It often is a star architecture with a NODAL point, to centralize all information technology.**

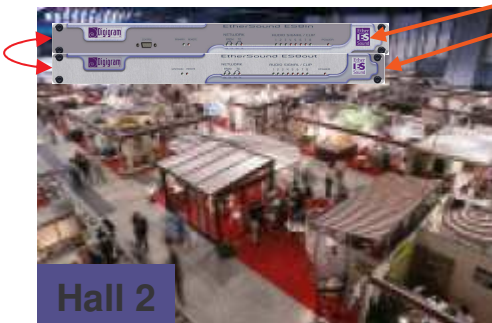
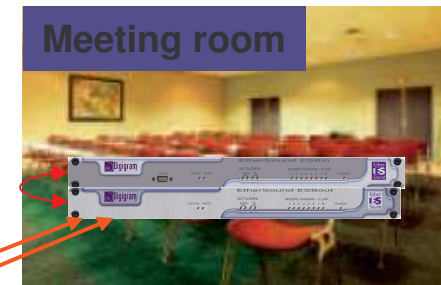
**If you want all inputs on all outputs, you need a daisy chain topology.**

**Thanks to a manageable switch (and VLAN), you can re-create a daisy chain.**

## To connect several rooms with a nodal point (1/2)



Switch  
+ VLAN



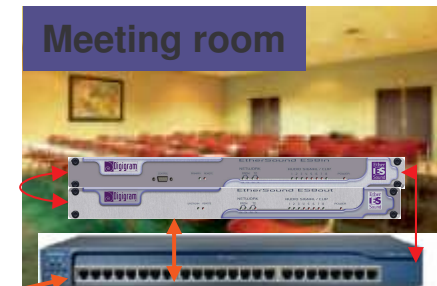
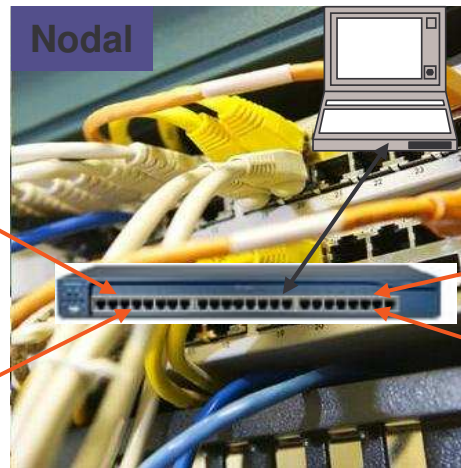
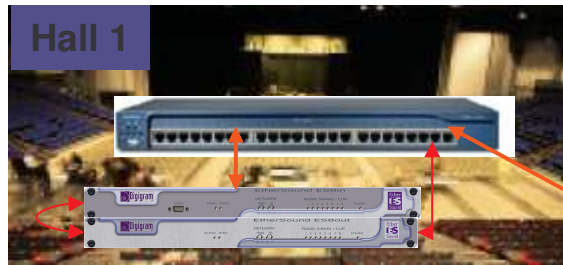
## To connect several rooms with a nodal point (2/2)

**It is the same application. But sometimes, it is impossible to have 2 cables going from the nodal to a room. In this case, you will need a switch in the room and to use an Gigabit network.**

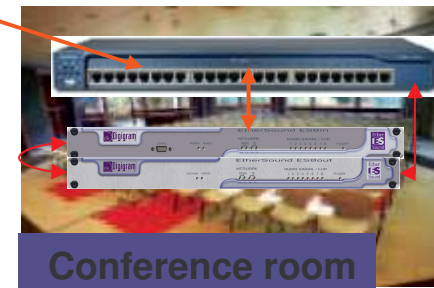
**You will on the same cable going from the nodal to the room, and go back from the room to the nodal -> you will need to tag your frames (thanks to the switch).**

**You will need a manageable gigabit switch, which can tag frames**

## To connect several rooms with a nodal point (2/2)



Switch  
+ VLAN  
+ tagging

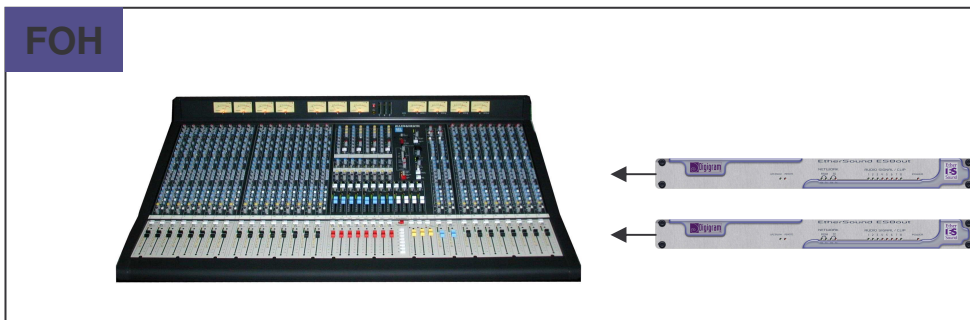


EX: Exhibition center: Angers (F)

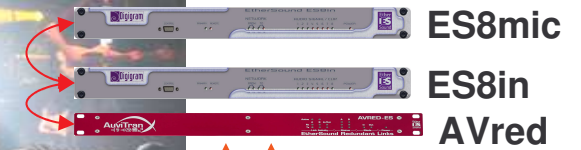


Ex: Thessaloniki stadium

## Stage – FOH



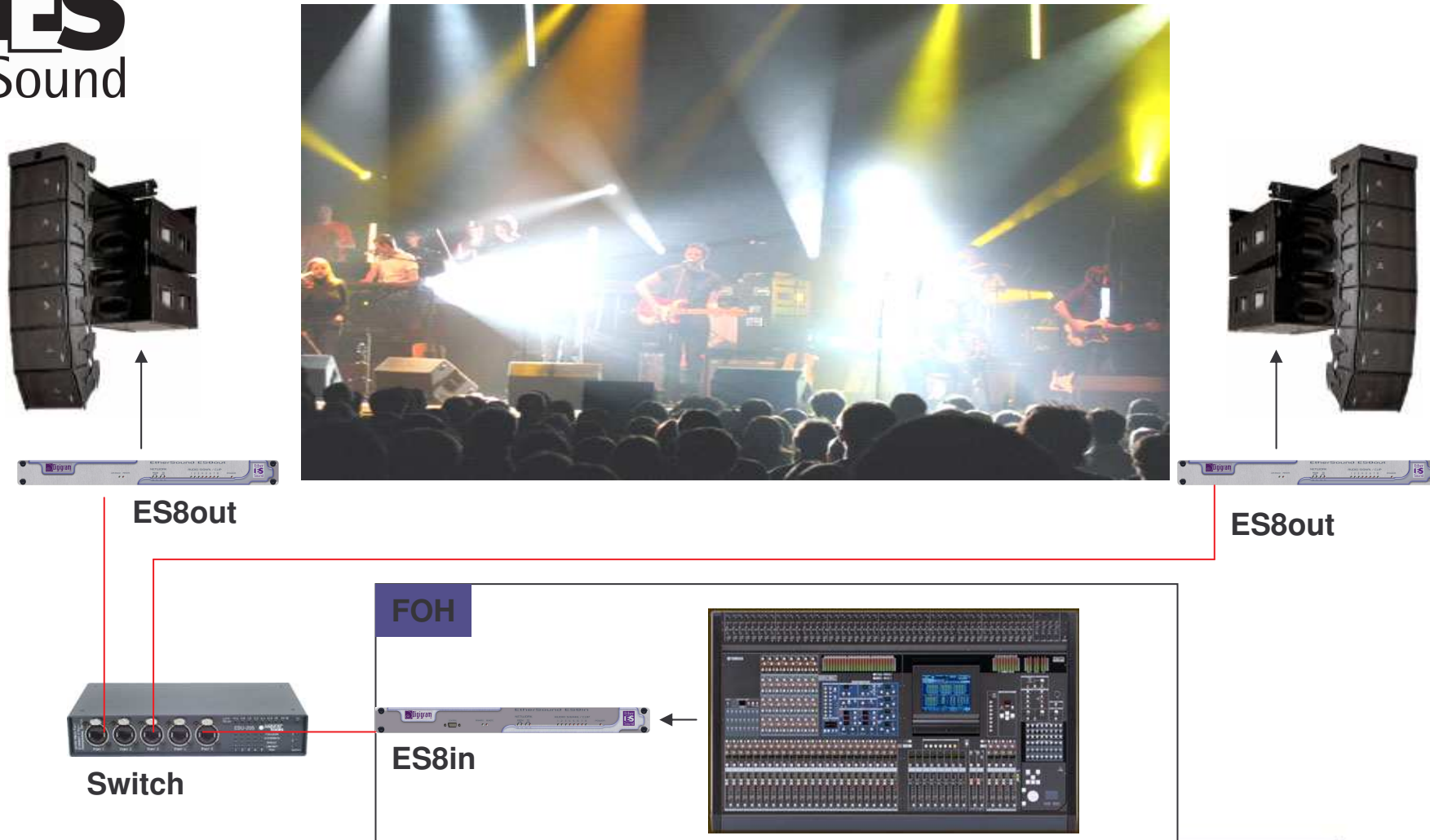
## Stage – FOH + redundancy



Double the cables

Ether  
**ES**  
Sound

## Console - FOH

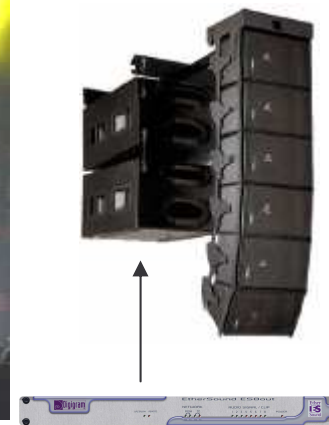


# Console – FOH + truck

Ether  
**ES**  
Sound



ES8out



ES8out

Fiber optic

Cat5/FO



Switch

FOH



ES8in



**Digigram**  
Networking Your Sound

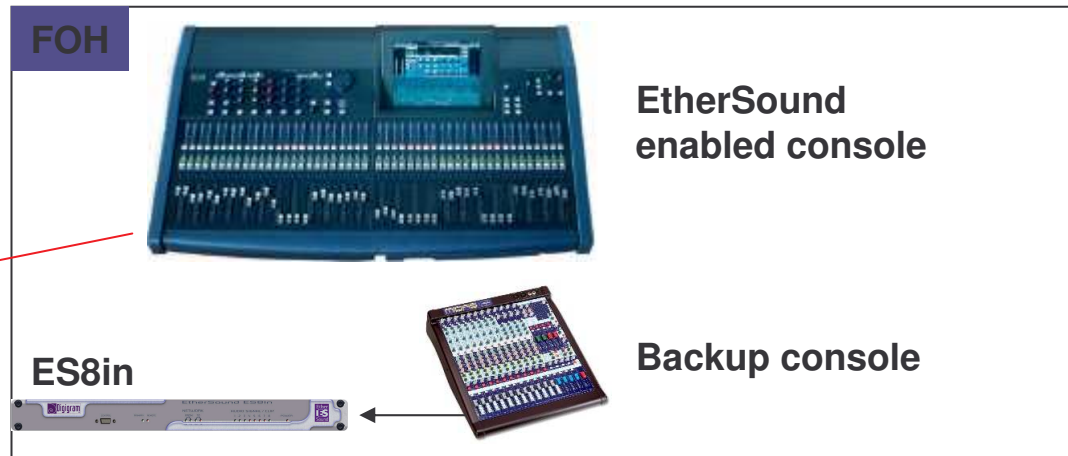
## Console + backup console



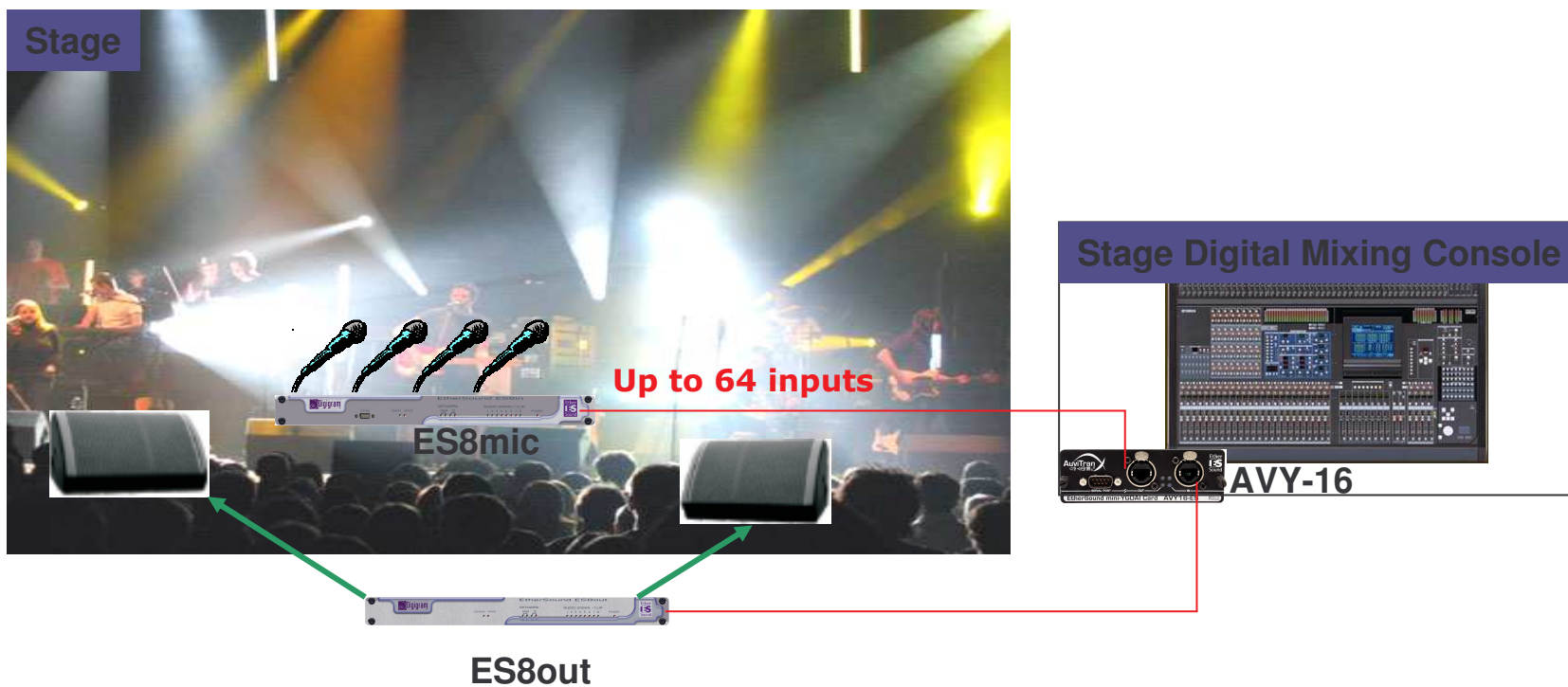
ES8out



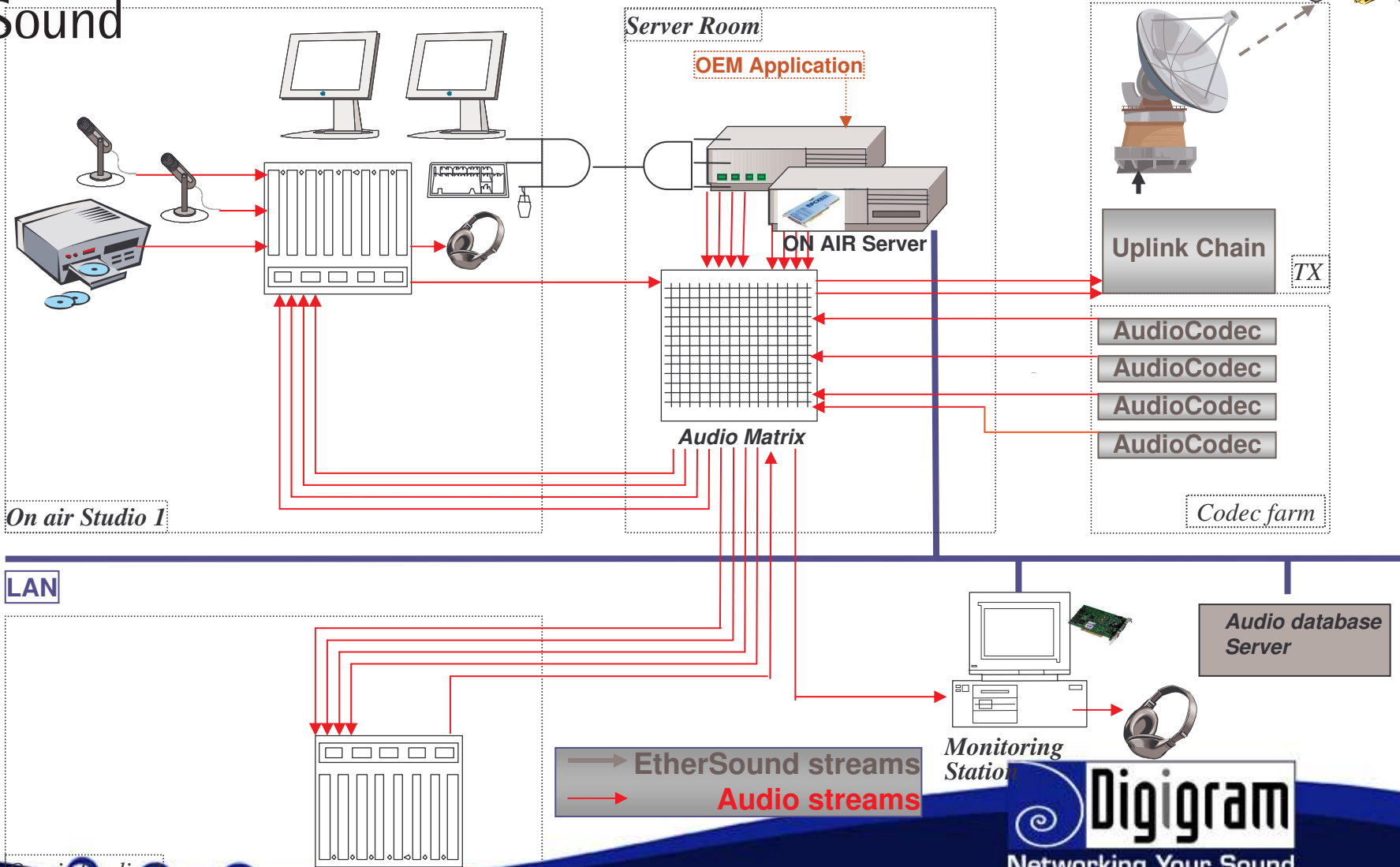
Manual switch  
to select A or B



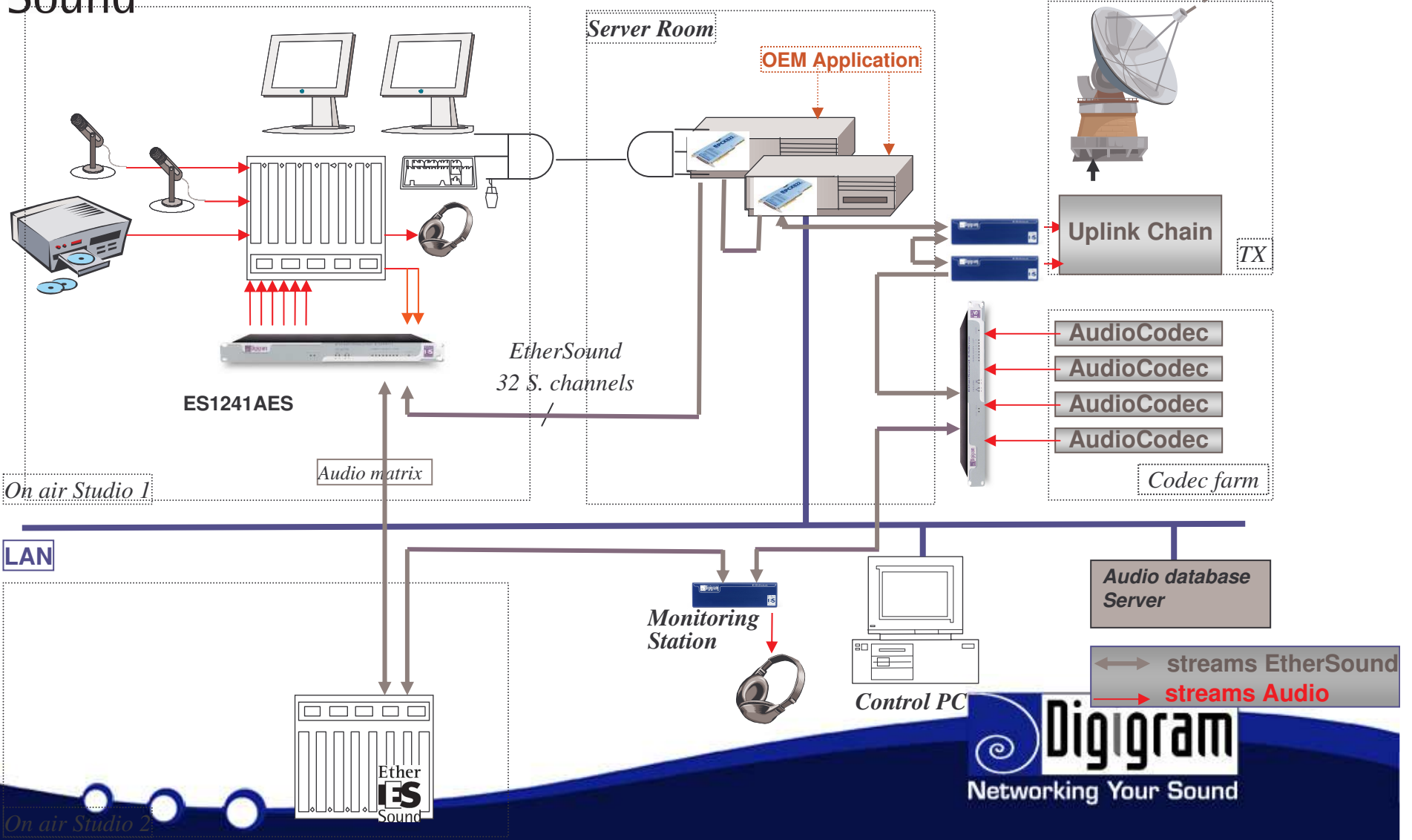
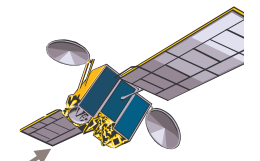
## Stage - Console stage



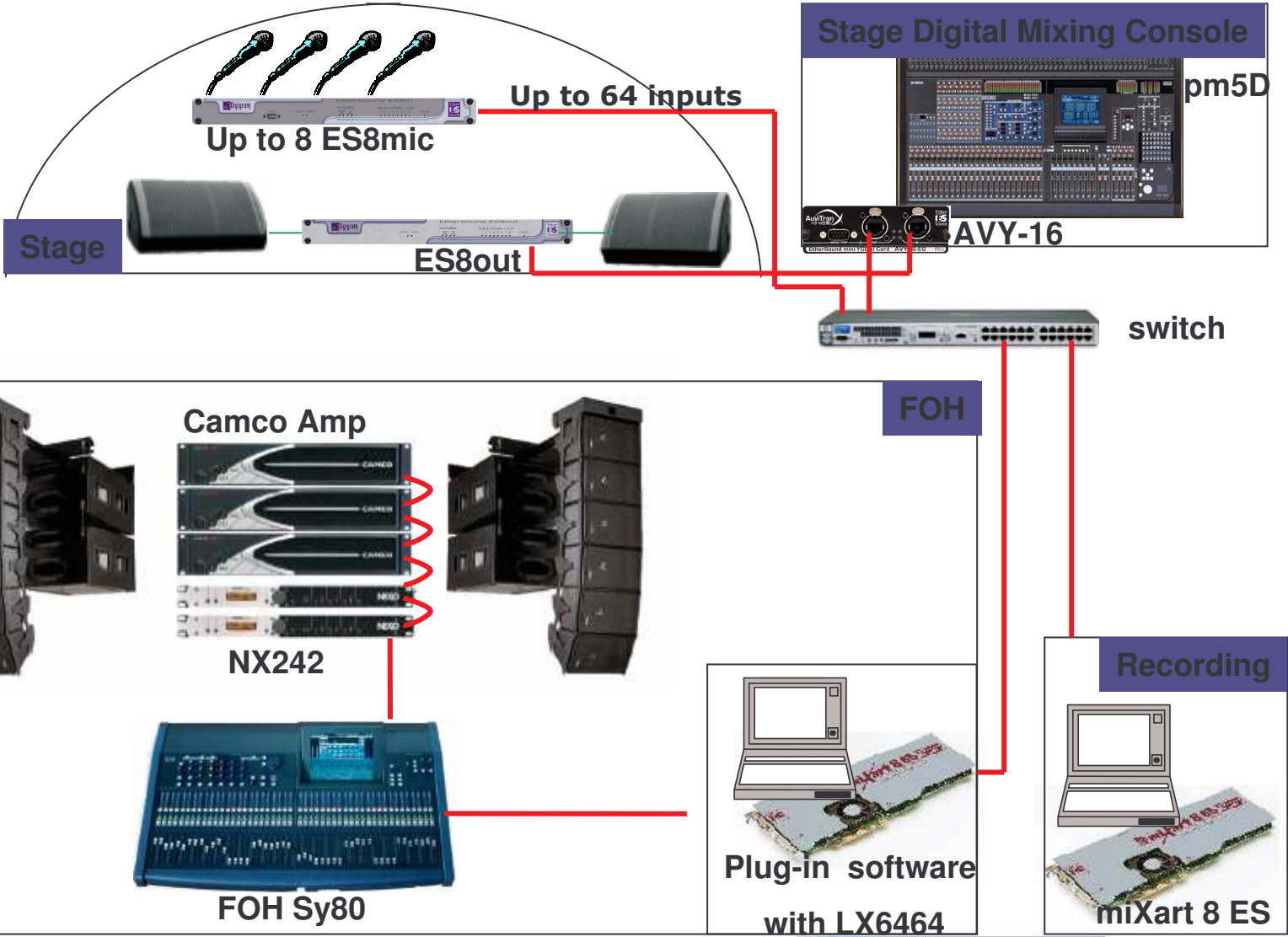
# Classical broadcast studio 1/2 without Ethersound



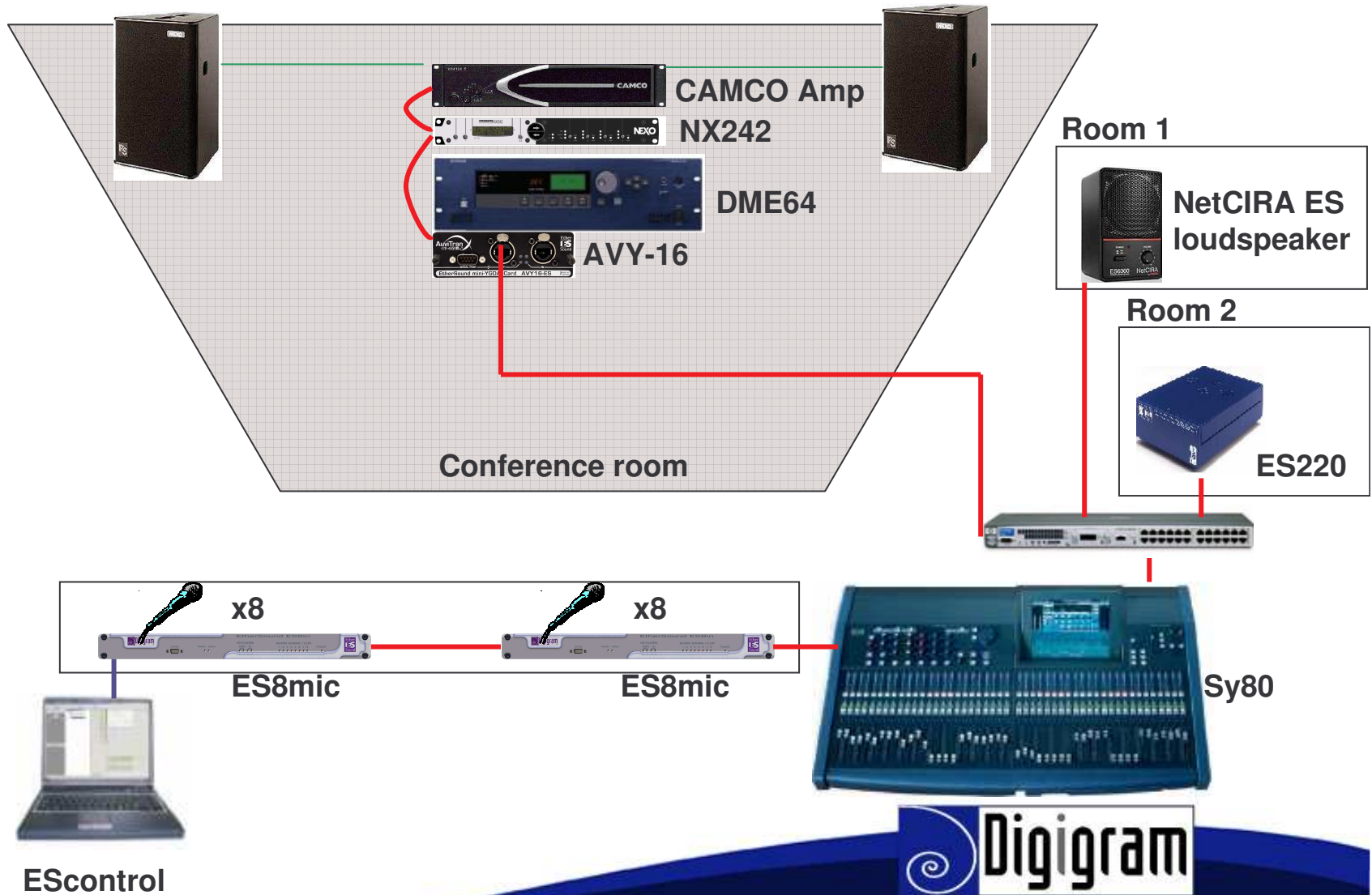
# Classical broadcast studio 2/2 with Ethersound (thanks to the future ring evolution)



# Multivendor EtherSound LIVE solutions



## Multivendor EtherSound solutions for Fixed Installation





# EtherSound Success Stories



# Carmen Concert Stade de France

## Principle:

The sound engineer wanted to distribute the sound issued by the console in the entire stadium without latency, synchronized.

Two daisy chains are installed around the stadium.

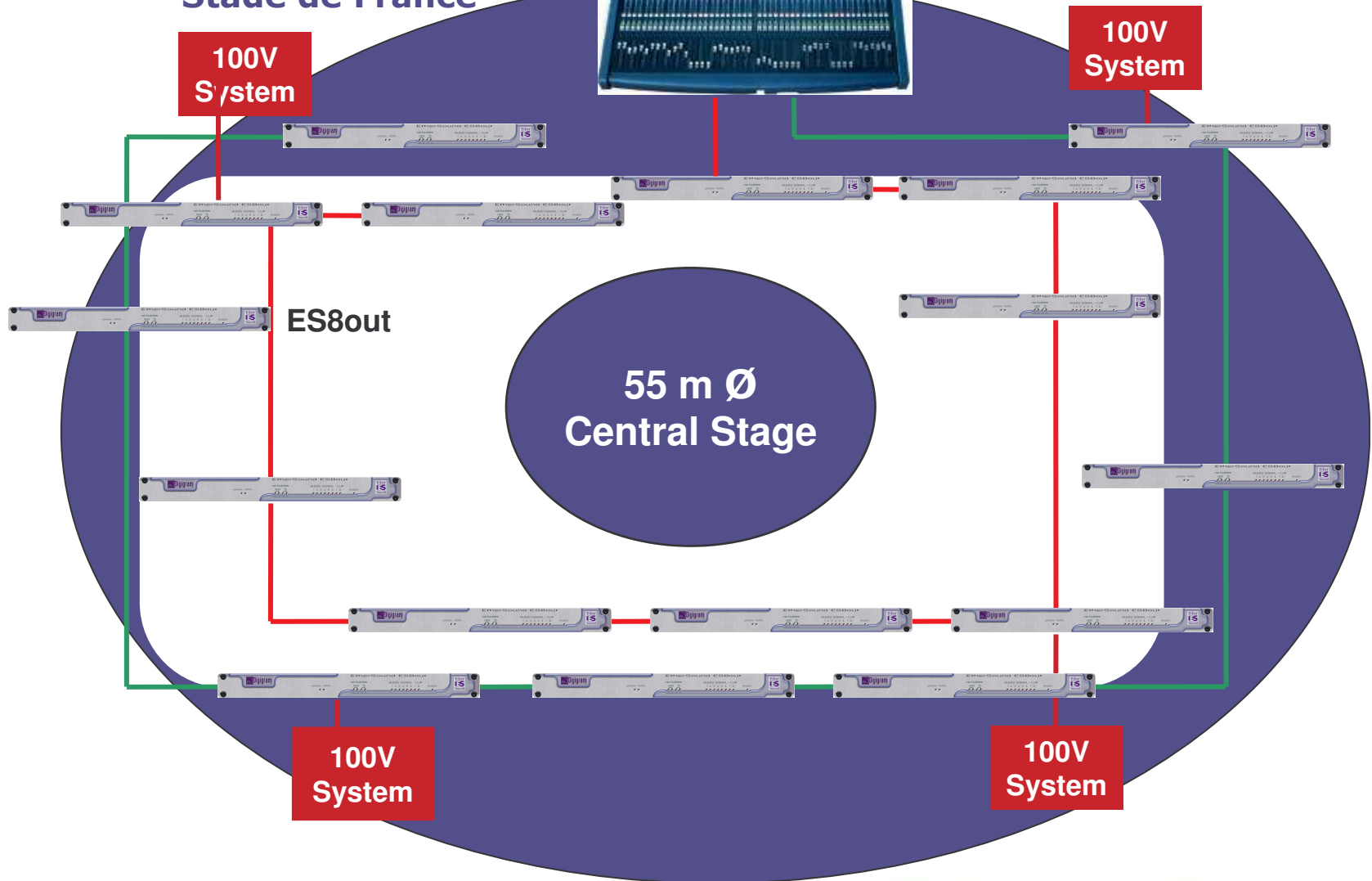
## Advantage of an EtherSound solution:

- few cables needed
- ability to bridge long distances
- for more inputs, just to add a box
- all devices are synchronized

**EtherSound Network  
Carmen Concert  
Stade de France**



**SY80 FOH console**



# Montreux Congress Center

## Principle:

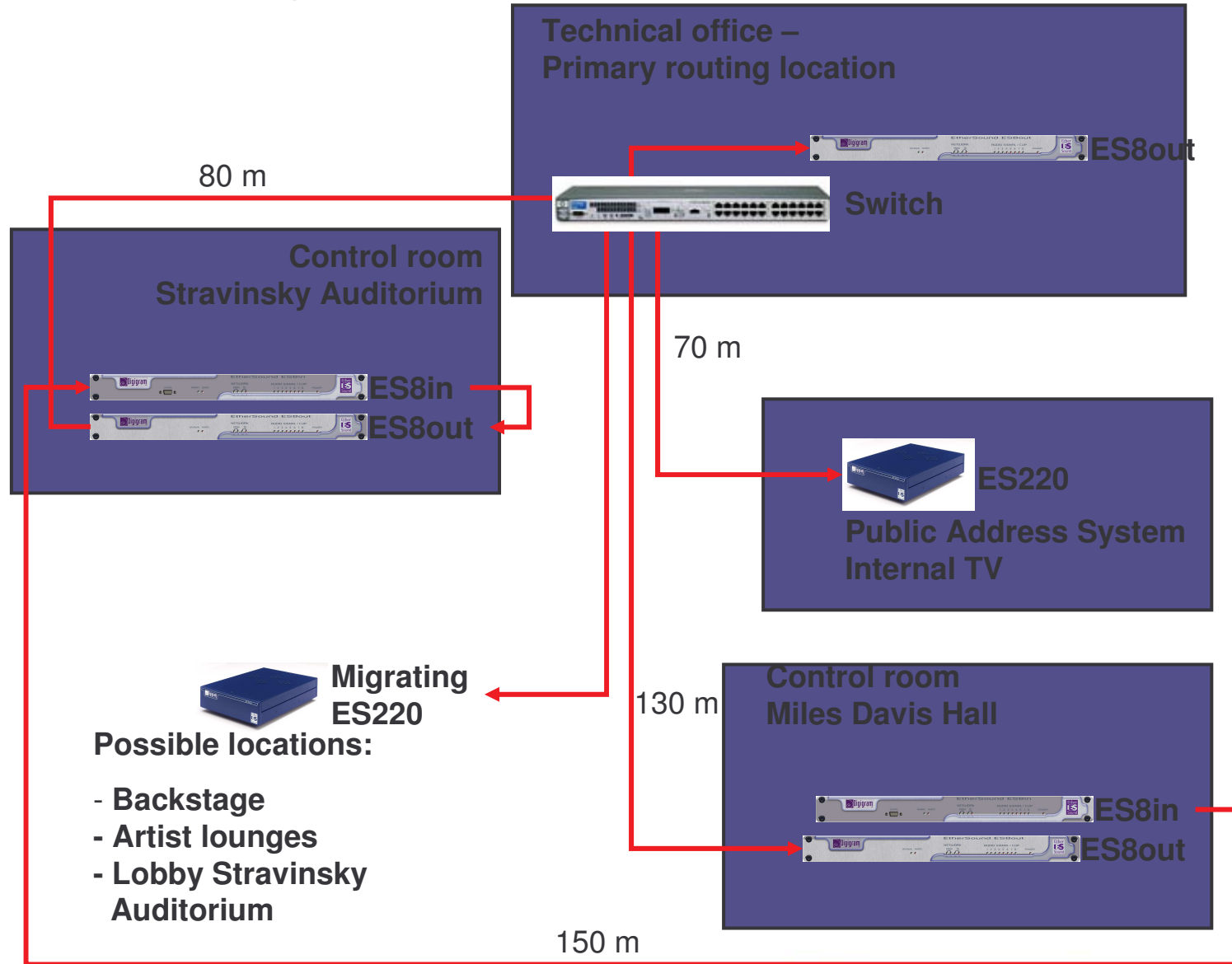
**The Montreux Congress Center is a huge building (in fact two separate buildings) with several stages.**

**Need for a flexible, re-configurable audio distribution solution, using the pre-installed network.**

## Advantage of an EtherSound solution:

- use of the existing network
- gain of time and flexibility for new configurations

### Montreux Congress Center



Possible locations:

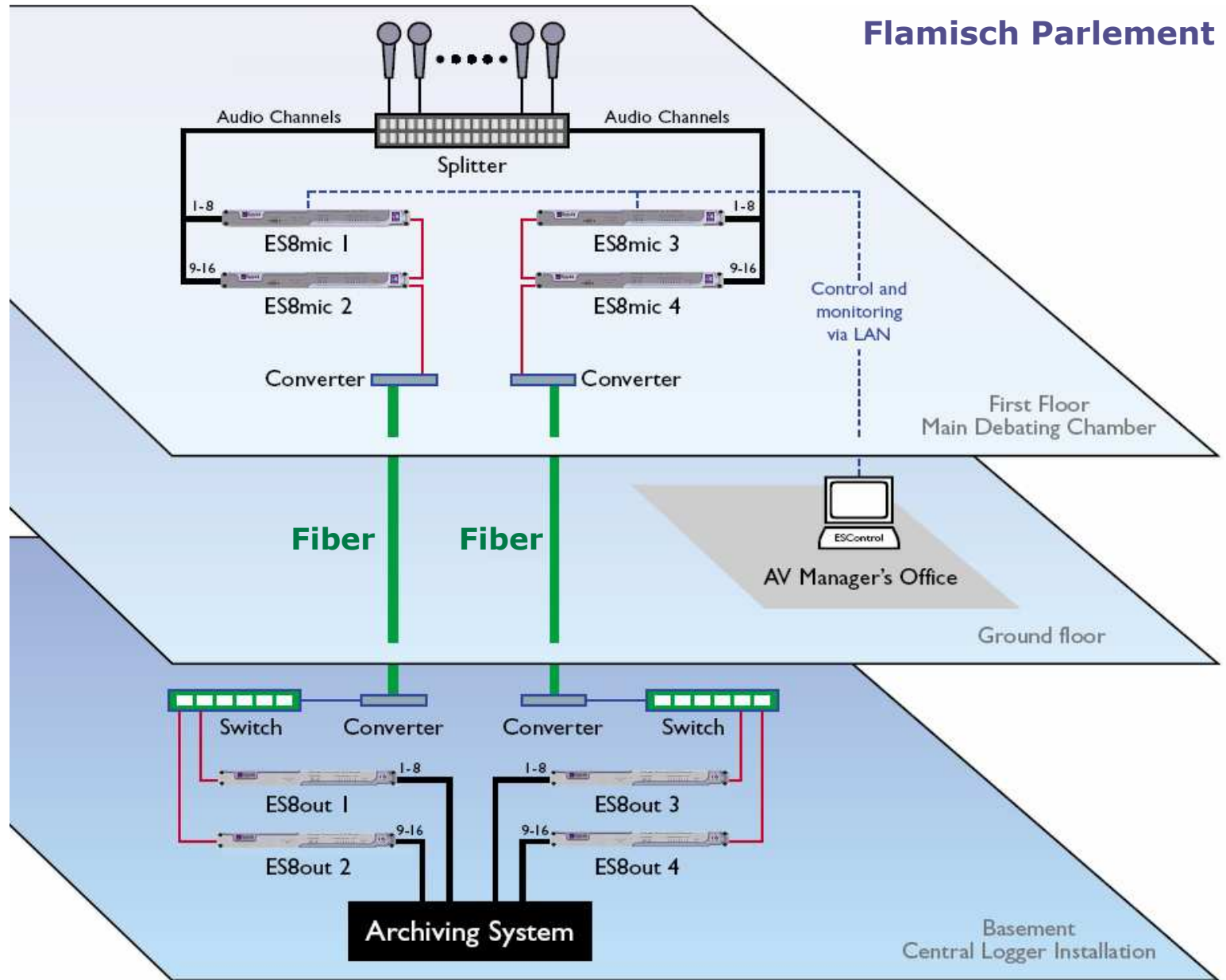
- Backstage
- Artist lounges
- Lobby Stravinsky Auditorium

## Principle:

**A logging solution. EtherSound is used to transport the sound from the microphones to the logging system.**

## Advantage of an EtherSound solution:

- use of the existing network
- long distance using the fiber optic
- easy routing



# The Montreux Jazz Festival

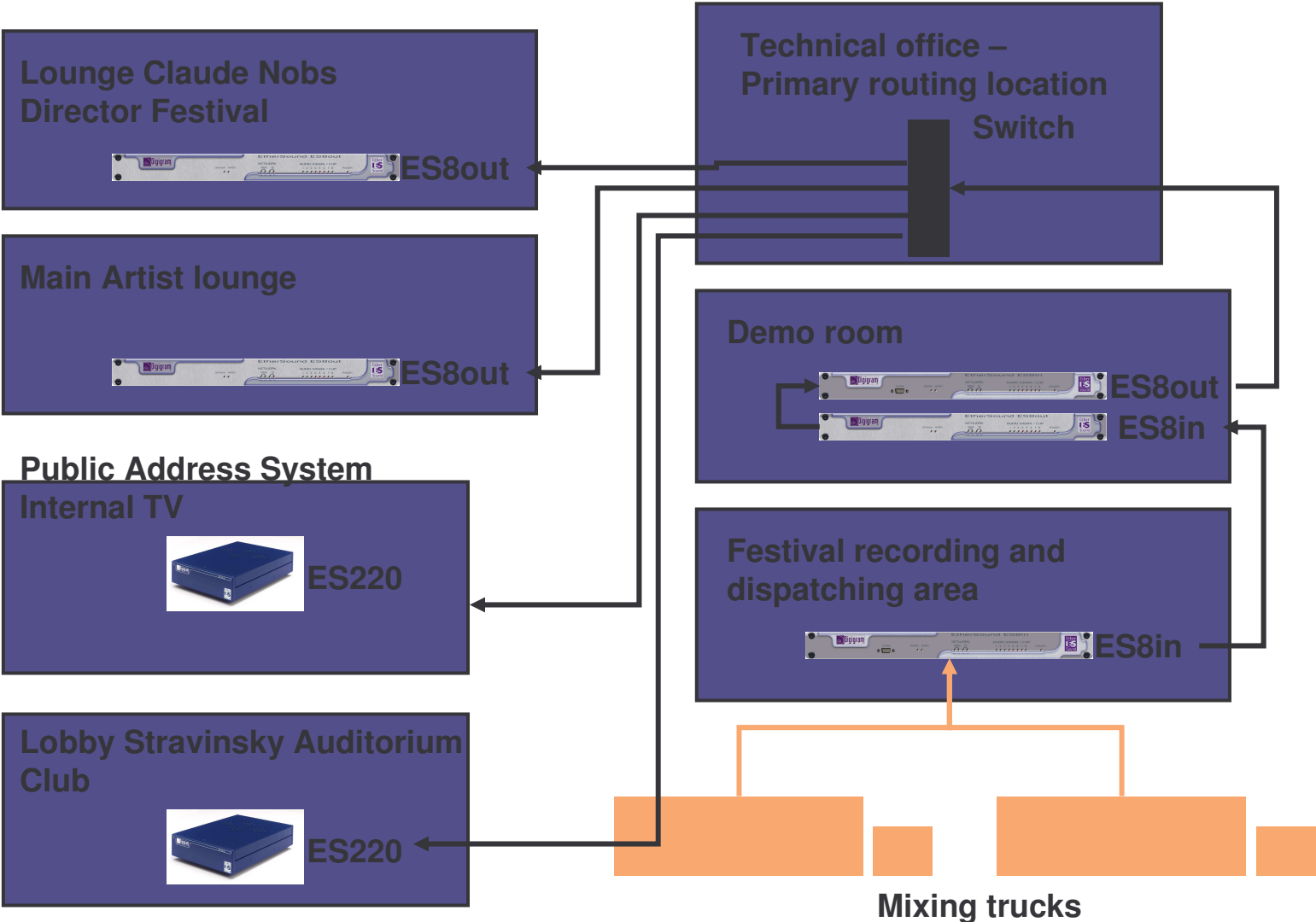
## Principle:

**Distribution of the sound distributed by the mixing truck**

## Advantage of an EtherSound solution:

- **less cables**
- **audio routing can be changed**
- **reduces time for system reconfiguration during Montreux Jazz Festival by almost 90 %**
- **stop the buzz problem between the different halls**

# The montreux Jazz festival



# Luxembourg Concert hall

## Principle:

**Distribution of the sound between the different rooms.**

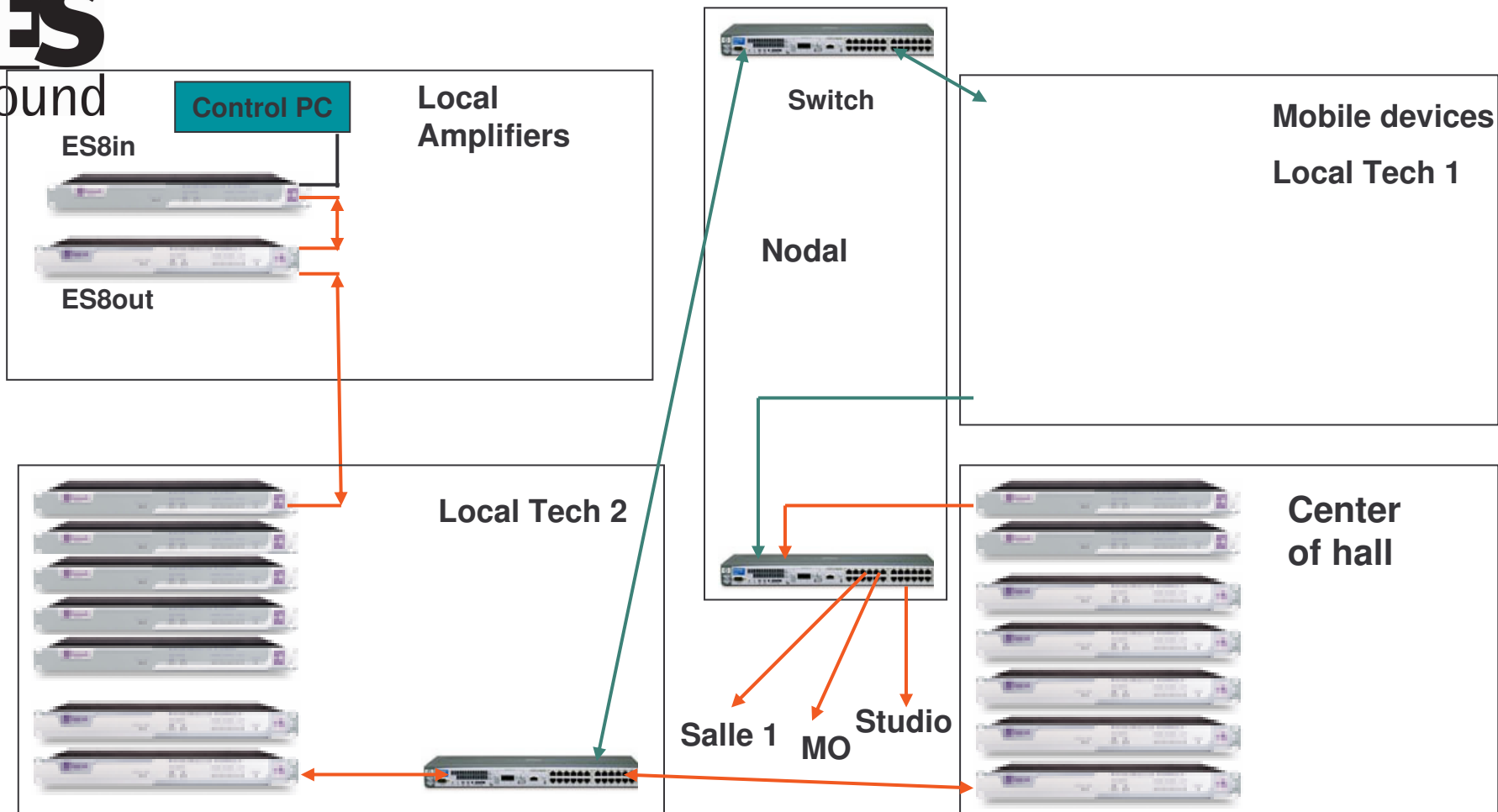
**Some of the equipment devices are mobile because the control room can be used in two different concert halls.**

## Advantage of an EtherSound solution:

- flexibility
- dynamic routing
- sound quality

## Concert hall with mobile console 1/2 (in Luxembourg)

Ether  
ES  
Sound

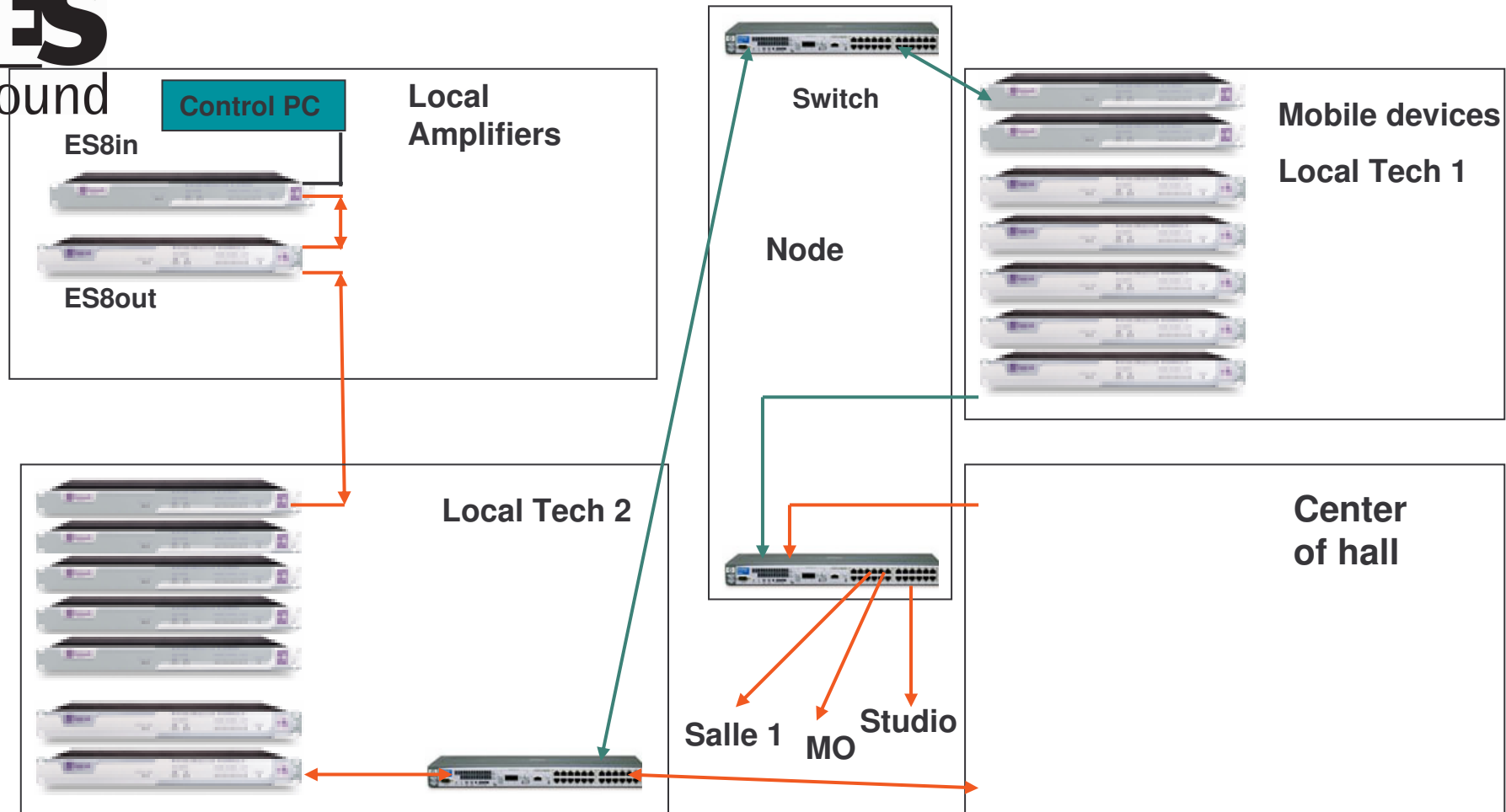


↔ : EtherSound « bi-directional »

→ : EtherSound « uni-directional »

## Concert hall with mobile console 2/2 (in Luxembourg)

Ether  
ES  
Sound



↔ : EtherSound « bi-directional »

→ : EtherSound « uni-directional »