Performing the Electronic Part

Devices needed

- 6 Speakers:
 - 2 full-range PA boxes with good bass, for instance QCS CP12 or Yamaha DZR 12.
 - **4 smaller speakers**. Studio monitor speakers like Genelec 8330 should work. Good frequency response is more important than RMS power.
- 2 (4) Microphones:
 - 2 usual condenser microphones (for instance Neumann KM 184)
 - 2 microphones fixed on the accordion
- Mixer with 4 inputs and 6 outputs. This is convenient but optional. See below.
- **Audio Interface** with 6 output channels (or 4 for the minimal version). If the 4 (2) microphone signals are mixed, only two line inputs are needed. If there is no mixer, 4 (2) microphone in inputs are needed.
- MIDI Controller with 8 or more fader, for instance Behringer BCF 2000.
- Computer with a software which can
 - play back the prerecorded sound files by hitting the space bar, and
 - perform real-time pitch shifting of the microphone input.

(For the first performance, MaxMSP has been used and this patch can be provided. But it is not difficult to write a similar patch in Csound, PD, SC or any other software for it.)

• The **pre-recorded sounds** (provided by the composer).

Minimal Version

• **4 instead of 6 speakers**. In this case, the two big PA speakers (= number 5 and 6 in the figure below) will be missing.

Note: **4 speakers** (2 on stage and 2 behind the audience) **is the minimum**. It is **not** possible to play the piece with only 2 speakers, because the dialog between tape and accordion (from bar 89 to last bar) "above the heads of the audience" is essential for the piece.

- 2 instead of 4 microphones.
- **Mixer desk can be omitted**; in this case the volume control must be done with the MIDI controller.

Position and Speaker Numbering

5	Accordion	6
	ca. 1m	
	Audience	-
	Electronics	
	Audience	-
	4	

- 1 4 = small speakers (mandatory)
- 5 6 = large speakers (optional)