

---

## Technical specification – Sound equipment

---

# Sidsel Endresen – Christian Wallumrød – Jan Bang

## Undertow Trio

### 2004

---

In case of problems meeting this specification, please do not hesitate to contact the artist through your contact. We ask local promoters or sound engineers not to make changes from this spec, on behalf of the artist, without confirming with artist or representative.

**Brands and types of sound equipment is meant as quality guidance, and not as absolute requirements if not stated specifically.**

## SOUND SYSTEM

### Equipment quality :

Sound equipment must be of high standard and free from audible noise. Mixing desk must be in a good position in the audience area to ensure good control possibilities. Equipment generating noise, such as amplifier-fans, must not be placed on stage or in the audience area. The sound system must be rigged and tested for functionality before artist arrives for setup and soundcheck. Local system engineer must be available for the artists own engineer at all times from soundcheck to end of concert.

### Speaker system:

High quality, active PA-system (with sub-woofers) covering all audience areas with uniform and undistorted sound. (Pref: dB&B, Meyer, EAW, Kling & Freitag or similar). We prefer the system to be located on stage level, not too wide, to help locating the sound source to the artist position. In case of high/wide flown system, we need a smaller in-fill/centre-fill system on stage floor. as image shifter.

### Monitor system:

**Note : Monitor-mixes shall be fed from FOH console!!**

5 identical wedges, preferably 15" and HF.

AUX 1	Sidsel Endresen	2 Wedges
AUX 2,3	Christian Wallumrød	2 Wedges
AUX 4	Jan Bang	1 Wedge

### Mixing console:

4 band input-EQ (min. 2 sweep mid-filters) on all inputs.

High-pass filter, phase switch, insert and 48V on all inputs.

Min. 4 pre-aux sends for monitor.

Min. 3 post- and 1 pre- aux sends for effects.

Preferred consoles: Midas Heritage/XL or Venice series, Yamaha PM series or similar.

**Note:** No compact digital consoles such as Yamaha 02R/03D/DM series or similar. Digital consoles can be InnovaSon, DigiCo D5 Live, Yamaha PM1D, or same level of quality and parameter accessibility.

### Outboard:

2 digital reverb units. (Lexicon 480L, 300, PCM90/80/70, LXP15, and/or TC M 6000/5000/4000/3000/2000, M-One )

1 digital delay unit ( pref: TC D-TWO )

We bring one Lexicon MPX as additional vocal FX.

Graphic EQ's on all speaker feeding outputs.

1 CD-player for system check.

# Instrument description and backline requirements

## Sidsel Endresen

### Brings:

Lexicon MPX 100 (to be connected at mixer position)

### Needs:

- 1 x music stand w/ light
- 1 x bar stool

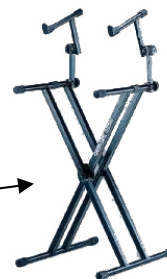
## Christian Wallumrød:

### Brings:

- 2 x synth + toy piano + mixer etc

### Needs:

- Grand piano (piano will be prepared, so high quality concert grand is NOT needed)
- Adjustable chair (piano stool preferred)
- Keyboard stand: Double-brace, 2-tier X stand with Quik Lok .
- 220–240V / 50 Hz AC for own instruments (max consumption 5 amps).



### IMPORTANT NOTE REGARDING THE GRAND PIANO:

The left pedal (damping pedal) on the grand piano should be properly adjusted, which means that when it is operated, the hammers are striking 2 strings and not 3 (on all keys that actually have 3 strings). However, if the pedal and all connections are well adjusted and (when pedal is operated) some of the hammers are still striking 3 strings (and not 2), the hammers should be adjusted as well.

## Jan Bang

Jan Bang is re-sampling the sounds of the other two musicians, and need feeds from their lines.

For this purpose we need microphone splitters on stage for each channel, for Jan Bang to have access to the microphones directly. This requires XLR cables from the splitters into Jan Bang's stage mixer.

### Brings:

- SP 808 Roland Sampler
- 1 Remix 16 Akai Sampler
- 1 Mackie FX mixer
- Misc. Cables and power supplies

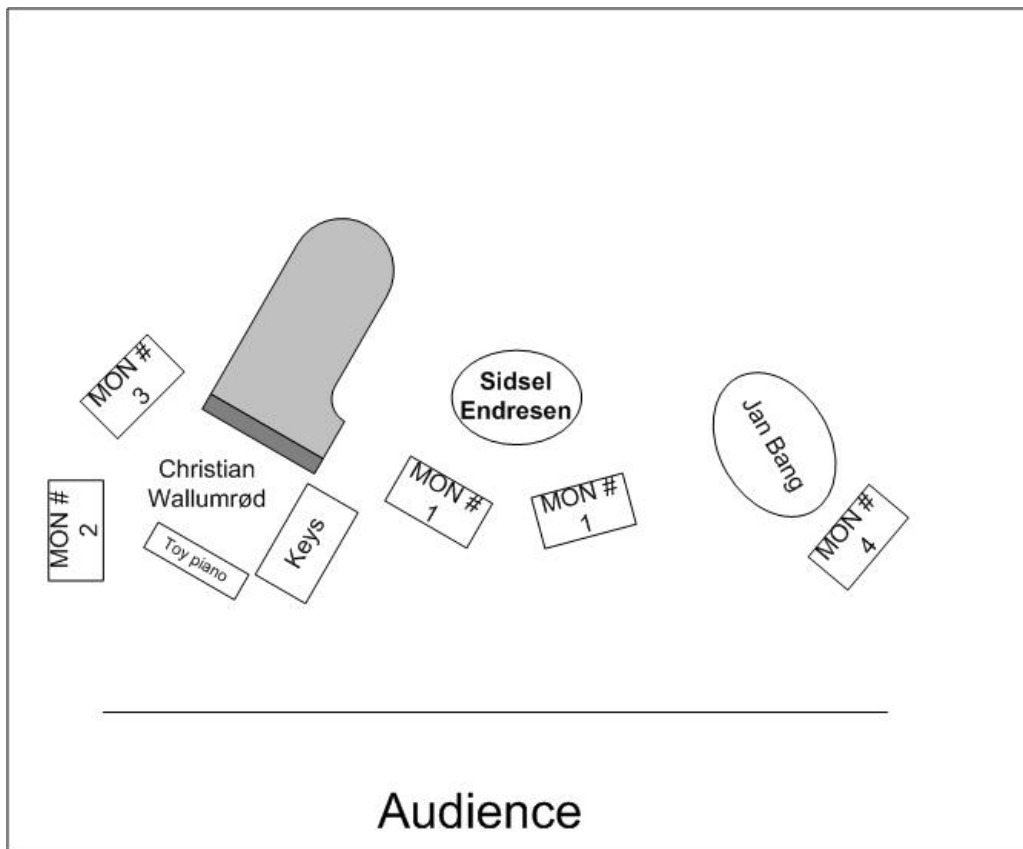
### Needs:

- 1 keyboard stand
- 1 Bar stool (without neck) for sampler.
- 2 DI boxes
- 1 dynamic microphone on a tall stand, at his position, for sampling (input to his mixer).
- Signal splits from channels (mic splitters or Y-cables):
  - 1 vocal. 2 Piano High, 3 Piano Mid, 3 Synth Left and 4 Synth Right.

## Lights

Venue must supply suitable light system with operator.

**Stage plot**



**Input list.**

Input	Source	Microphone/DI	Stand	Comment
1	Grand Piano HI	Good Condenser. (pref. Neum.KM184)	Large w/boom	Note: Prepared piano
2	Grand Piano MID	"	Large w/boom	No high quality grand needed.
3	Grand Piano LO	"	Large w/boom	
4	Key mix CW L	Active DI / XLR		NOTE : NO 48 Volts
5	Key mix CW R	Active DI / XLR		NOTE : NO 48 Volts
6	Toy Piano	Condenser	Small w/boom	
7	Mix L Jan Bang	Active DI		
8	Mix R Jan Bang	Active DI		
x	Sampling mike	SM 58	Large w/boom	Input to Jan Bangs mixer
10	Vocal	SHURE Beta58A or old SM58	Large w/boom	(Not SM 58 BETA)
11	Vocal split	Split from previous channel		
17	Rev 1 L			
18	Rev 1 R			
19	Rev 2 L			
20	Rev 2 R			
21	Delay L			
22	Delay R			
23	MPX L			We bring
24	MPX R			"

MPX takes input from free pre-aux or any pre output from Vocal split channel