

- 1 PA - Outer - L (Scaffolding)**
- 6 Midsize Line Array Module, 2-way, fullrange, 2x8"/10"+horn, active or passive
Number of modules for even vertical coverage depending on system
Please include calculation/ simulation in your offer!
d&b V8, L'Acoustics KARA, Meyer Sound M'elodie or similar
 - 1 all Controller/ Amps needed for above-noted Line Array System
 - 1 Rigging System (Bumper/Craddle,...) for above-noted Line Array System
 - 1 Hoist for above-noted Line Array System + officially required safeties
 - 1 Cords for securing above-noted Line Array System against twisting
- 2 PA - Outer - R (Scaffolding)**
- 6 Midsize Line Array Module, 2-way, fullrange, 2x8"/10"+horn, active or passive
Number of modules for even vertical coverage depending on system
Please include calculation/ simulation in your offer!
d&b V8, L'Acoustics KARA, Meyer Sound M'elodie or similar
 - 1 all Controller/ Amps needed for above-noted Line Array System
 - 1 Rigging System (Bumper/Craddle,...) for above-noted Line Array System
 - 1 Hoist for above-noted Line Array System + officially required safeties
 - 1 Cords for securing above-noted Line Array System against twisting
- 3 PA - Inner - L (Tower)**
- 6 Midsize Line Array Module, 2-way, fullrange, 2x8"/10"+horn, active or passive
Number of modules for even vertical coverage depending on system
Please include calculation/ simulation in your offer!
d&b V8, L'Acoustics KARA, Meyer Sound M'elodie or similar
 - 1 all Controller/ Amps needed for above-noted Line Array System
 - 1 Rigging System (Bumper/Craddle,...) for above-noted Line Array System
 - 1 Hoist for above-noted Line Array System + officially required safeties
 - 1 Cords for securing above-noted Line Array System against twisting
- 4 PA - Inner - R (Tower)**
- 6 Midsize Line Array Module, 2-way, fullrange, 2x8"/10"+horn, active or passive
Number of modules for even vertical coverage depending on system
Please include calculation/ simulation in your offer!
d&b V8, L'Acoustics KARA, Meyer Sound M'elodie or similar
 - 1 all Controller/ Amps needed for above-noted Line Array System
 - 1 Rigging System (Bumper/Craddle,...) for above-noted Line Array System
 - 1 Hoist for above-noted Line Array System + officially required safeties
 - 1 Cords for securing above-noted Line Array System against twisting
- 5 PA - Subs stacked**
- 4 Subwoofer, omnidirectional, double 18", active or passive
d&b B2, L'Acoustics SB218, Meyer Sound 1100-LFC or similar
 - 1 all Controller/ Amps needed to drive above-noted Sub Woofers in stereo
- 6 Surround Speakers**
- 20 Fullrange Speaker, 1- or 2-way, min. coverage 90⁰ x 60⁰, active or passive
116 db continuous SPL min.

- Column speakers with large vertical dispersion also possible
- Bose 802 III, JBL CBT 70J-1 + 70JE-1 or similar
- Mounting hardware for flown application incl. safeties, possibility to swivel and tilt
- Pole/ truss for mounting app. 6m above audience level incl. concrete base or similar
- 1 Controller/ Amps to drive above-noted Speakers in 8 discrete zones

7 Under Tribune FX Speakers

- 8 Fullrange Speaker, 1- or 2-way, min. coverage 90° x 60°, active or passive
- 116 db continuous SPL min.
- Bose 802 III, L'Acoustics 12 or similar
- Mounting hardware for attachment to tribune incl. safeties, possibility to swivel and tilt
- 1 Controller/ Amps to drive above-noted Speakers in 2 discrete zones

8 Monitoring Downstage

- 4 Monitor Speaker, 1- or 2-way, hor. coverage 90° min., active or passive
- Bose 802 III or similar
- 1 Controller/ Amps needed to drive above-noted Monitor Speakers in stereo

9 Monitoring Offstage

- 12 Monitor Speaker, compact, 1- or 2-way, 8", active
- L'Acoustics 108P, Meyer Sound UPJunior or similar
- 12 Mounting Hardware (Manfrotto,...)

10 Microphones hardwired + D.I.

- 4 Premium condenser microphone, cardioid
- Schoeps CMC6xt+MK4, Sennheiser 8040, Neumann KM140, dpa4011
- 2 Premium condenser microphone, supercardioid
- Schoeps CMC6xt+MK41, Sennheiser 8050, Neumann KM150, dpa4018
- 1 Premium condenser microphone, wide cardioid
- Schoeps CMC6xt+MK21, Sennheiser 8090, Neumann KM143, dpa4015
- 1 Premium condenser microphone, omni
- Schoeps CMC6xt+MK2S, Sennheiser 8020, Neumann KM130, dpa4006
- These 8 orchestra microphones have to be from the same manufacturer and product line!
- 8 Elastic suspension for above-noted microphones
- Schoeps A20 or similar
- 1 Mounting Bar A/B + ORTF, 100cm
- Schoeps MAB1000 or similar
- 1 Mounting Hardware for flown application in orchestra tent
- Manfrotto or similar
- 4 Overhead microphone stand with boom, xtra tall
- K&M 21021 or similar
- 3 Premium D.I.-Box, stereo (or 2xmono), active or passive,
- for keyboards emulating celesta, organ and cannons
- Radial Engineering, BSS or similar

11 Sample Player

- 1 Sample player, stereo out, ext. Trigger, proprietary hardware solution preferred
- 360 Systems Instant Replay or similar

12 Microphones wireless

- 28 Premium wireless dual-channel receiver

- Shure UR4D, Sennheiser EM3732 or similar
- 3 Diversity pair of directional active antennas + small microphone stand black or similar
Shure UA874, Sennheiser A12AD
- 1 Diversity pair of omnidirectional antennas + mounting hardware or similar
Shure UA8, Sennheiser A3700
- 1 Antenna Combiner for above-noted antennas or similar
Shure PA421 (x2, modified to power active antennas), Sennheiser ACA1
- 1 Antenna booster and cabling for above-noted system or similar
Shure, Sennheiser
- 2 Premium handheld transmitter + (super)cardioid capsule + foam windscreen or similar
Shure UR2/Beta87, Sennheiser SKM5200/KK105
- 56 Premium beltpack transmitter or similar
Shure UR1(M), Sennheiser SK5212
- 66 Miniature omnidirectional condenser microphone, beige (choir) or similar
Sanken COS-11, dpa 4060
- 20 Miniature omnidirectional condenser microphone, beige, water-resistant or similar
Sanken COS-11
- 56 Pouches for beltpack transmitters or similar
Sennheiser, custom made
- x Batteries for all rehearsals and shows
- x Material for head-mounting miniature-microphone for all rehearsals and shows or similar
Adhesives from different brands (Leukoplast, Hansaplast,...),
hair needles and springs, alcohol pads, etc.

Available frequencies have to be checked before set-up with suitable measuring equipment.
Special attention has to be taken for local TV-stations and other transmitters nearby.
Frequency-management for stable operation is mandatory.
All equipment has to be checked mechanically and electronically for any faults before delivery.
Especially beltpacks and miniature microphones have to be checked for any mechanical flaws like crackling, cable break, loose battery-contacts and dropouts in advance.

13 **Choir Sub Mix Position**

- 1 Mixing console, 48/8/2, analog or digital, variable LoCut or similar
Midas, Soundcraft, Yamaha
- 1 Pair of Active Nearfield Studio Monitors or similar
Genelec, JBL, Yamaha
- 1 Pair of Studio Monitoring Headphones or similar
Sennheiser

14 **FOH Position**

- 1 Premium Digital Mixing Console, min. 96 input channels to 32 bus/ aux/ mtx multicore and stagebox with min. 48 mic-inputs, 16 line-outs analog or digital depending on PA-system, min. 6 x AES/EBU (4chOut, 12chIn) 48kHz at FOH or similar
Soundcraft Vi, Studer Vista, Yamaha CL
- 1 Dual CD-Player or similar
Denon
- 1 Digital Stereo Recorder. HD, flashcard, USB or similar
Denon, Zoom
- 1 Activ Press Splitter, mono input, min. 8 output or similar
Drawmer KickBox 4x4

15 **Cabling**

- 1 All necessary audio cabling
Multicores, subcores, microphone- and speaker-lines, adapters,...

16 **Power**

- 1 All necessary power cabling and distribution according to local specs
Earthing and grounding due to national laws!

17 Communication

- 3 2-way intercom-system, hardwired from FOH to monitor/ systech
and stagemanager/ director. Desktop or 19" station with speaker/ mic
Riedel, Drake, Telex or similar
- 3 hand-held radio incl. charging station. FOH, systech, assistant eng
Motorola, Kenwood or similar

18 Staff

- 1 System technician for all rehearsals and shows
General system supervising and trouble-shooting, choir sub-mix
- 1 All necessary man-power for set-up, commissioning and dismantling