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## Live Requirements (Minimal) April 2008

The following are details of the **minimum** technical specification required by *4 de Diciembre* for a live performance. A competent sound engineer who knows his/her equipment well is a must. *4 de Diciembre* is a large band, requiring skill and patience to get the sound right for its 11+ members **and** your audience.

If you require any further information or have any questions, please contact:

Loo Yeo email: enquiries@salsa-merengue.co.uk telephone: +44 (0)7823 888 227

Should you require guidance on compliance with sound limits for your venue, these can be found at: http://www.opsi.gov.uk/si/si2005/20051643.htm

#### Front of House (FoH)

#### **Public Address System:**

• A stereo FoH system capable of reproducing a clean, undistorted signal from 20 Hz to 20 kHz evenly throughout the entire audience area at an adequate and appropriate level.

#### Desk:

- A minimum of a 16-channel desk with separate stereo returns for FX, typically: Yamaha Digital, Allen & Heath, or Soundcraft.
- Phantom power (+48v) is required switchable per channel if possible.
- Each channel should have a 4-band EQ with sweepable mid-ranges and a low pass filter.
- At least 4 pre- and 2 post- fade auxiliary sends, 6 pre- and 2 post- if possible.

The ideal location of the desk is just off the centre-axis of the stage at audience level. We understand that this may not be possible because of the room: dance-floor in front of the stage, *etc*. However, a site as close to the ideal as possible is highly recommended. Please note that mixing FoH from just in front of and to the side of stage, or on the stage itself is not acceptable.

#### **FoH Processing**

(not applicable when processors are incorporated into the desk e.g. Yamaha LS9)

- 1x Stereo 31-band Graphic EQ inserted over Main output BSS / LA Audio (not Behringer).
- 8x Compressors Drawmer / TL Audio / Alesis.
- 2 x Reverb Units each on a post fade aux TC Electronic M.One / Yamaha SPX 990 / SPX2000.

## Stage Monitoring (when mixed from FoH)

- An absolute minimum of a 4-way monitor mix is needed. A 6-way monitor mix is ideal, in which case the desk auxiliaries will then need to be 6 pre- and 2 post-.
- 8 x 12" high-quality wedges e.g., Turbosound TXD-12M.
- Matching model amplifiers providing 4 or 6 channels of amplification, dependant on mix sends.
- 31-band graphic EQ inserted on all sends (excludes desks like Yamaha LS9).

# Stage Monitoring (when mixed with monitor desk from stage)

- Competent monitor engineer.
- Multicore split, passive or active.
- 16-channel desk with 8 auxiliaries, 4-band EQ, sweepable mid-ranges, high pass filter and listen wedge output, typically: Yamaha Digital, Allen & Heath, or Soundcraft.
- 8-way monitor mix on stage.
- Matching model amplifiers providing 9 channels of amplification.
- 9 x 12" high quality wedges e.g., Turbosound TXD-12M (one used as listen wedge).
- 31-band graphic EQ inserted on all 8 sends (excludes desks like Yamaha LS9).

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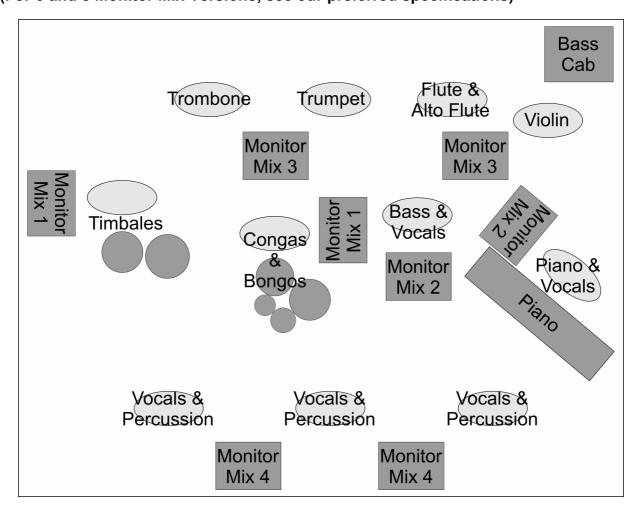
## **Channel List**

*4 de Diciembre* provides the microphones stated "(supplied)" below. Acceptable DI boxes are those comparable to: BSS AR133, Behringer DI100. Channels requiring compression (COMP) are noted.

Chan.	Instrument	Microphone / D.I.	Stand	Other
1	Left Vocal	Neumann KMS 104 (supplied)	Standard Boom	+48V, COMP
2	Centre Vocal	Neumann KMS 104 (supplied)	Standard Boom	+48V, COMP
3	Right Vocal	Good Quality Dynamic (e.g. SM58, e945)	Standard Boom	COMP
4	Bass Vocal	Good Quality Dynamic (e.g. SM58, e945)	Standard Boom	COMP
5	Piano Vocal	Good Quality Dynamic (e.g. SM58, e945)	Standard Boom	COMP
6	Timbales	Narrow Condenser (e.g. sE3, sE4, AKG-451)	Standard Boom	+48V
7	Conga	Sure BETA98 D/S (supplied)	none	+48V
8	Tumba	Sure BETA98 D/S (supplied)	none	+48V
9	Bongo	Narrow Condenser (e.g. sE3, sE4, AKG-451)	Standard Boom +48V	
10	Bass	Markbass TA501 Amplifier (supplied)	none	+48V, DI, COMP
11	Piano	Roland Stage Piano (supplied)	Keyboard (supplied)	+48V, DI
12	Trombone	High-SPL Tolerant Dynamic (e.g. SM58, e905, MD421)	Straight	COMP
13	Trumpet	Good Quality Dynamic (e.g. SM58)	Straight	COMP
14	Concert Flute	AMT Roam 3 Wireless (supplied)	none	XLR
15	Alto Flute	AMT WS (supplied)	none	+48V, DI with XLR input
16	Violin	AMT Roam 2 Wireless (supplied)	none	XLR

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# Example Stage Configuration – <u>4 Monitor Mix Version</u> (For 6 and 8 Monitor Mix Versions, see our preferred specifications)



## Notes

- The example stage configuration diagram is approximately to 1:33 scale, thus the stage measures 5.3 metres x 4.1 metres. So a standard 6x4 meter stage would be ideal.
- 4 de Diciembre possesses Alesis HD24XR hard disk recorders (http://www.alesis.com/hd24), and is likely to request that one of these units be connected to the desk and their performance recorded. Please have the information to hand as to what materials are necessary to do so e.g. connectors required and their configuration. Where fed from the direct outs of a desk they must be set to Pre Fade so as not to disturb the recording levels when mixing the band live. If you are able to, then also have them Pre Insert / EQ but we know this is not always possible.

# Acknowledgements

We are indebted to Chris Thornton-Smith of Blast PA (http://www.thebpasgroup.co.uk/blastpa.htm) for his generous input and advice in the specification of these requirements.