Guía Ejercicios N° 2: Diseño e Instalación de Sistemas de Audio

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Procesadores - Preamplificadores

1) Dibuje un diagrama de nivel considerando que un orador genera 65dB SPL a 1m (Recuerde proyectar el SPL a 10cm del micrófono como entrada al sistema). Analice la curva para nivel nominal. Recuerde marcar en el diagrama: Nivel máximo de entrada y salida en dBu, nivel de ruido propio en dBu para micrófono y consola.

   Micrófono: AKG D5 (ver anexo)
   Consola: MACKIE 1202-VLZ3 (ver anexo)

Extracto manual CONSOLA MACKIE 1202-VLZ3 (12 CANALES) – Ganancia de entrada

4. GAIN (Channels 1–4)

If you haven't already, please read the Level-Setting Procedure on page 3.

GAIN adjusts the input sensitivity of the mic and line inputs connected to channels 1 through 4. This allows signals from the outside world to be adjusted to optimal internal operating levels.

If the signal originates through the XLR jack, there will be 0 dB of gain with the knob fully down, ramping to 60 dB of gain fully up.

Through the 1/4" input, there is 15 dB of attenuation fully down and 45 dB of gain fully up, with a "U" (unity gain) mark at 10:00. This 15 dB of attenuation can be very handy when you are inserting a very hot signal, or when you want to add a lot of EQ gain, or both. Without this "virtual pad," this scenario might lead to channel clipping.

Especificaciones técnicas - CONSOLA MACKIE 1202-VLZ3 (12 CANALES)

1202-VLZ3

Specifications

Main Mix Noise

(20 Hz–20 kHz bandwidth, 1/4" Main out, channels 1–4 Trim @ unity gain, channel EQs flat, all channels assigned to Main Mix, channels 1 and 3 Pan left, 2 and 4 Pan right.)

Main Mix knob down, channel Gain knobs down: –100 dBu

Main Mix knob unity, channel Gain knobs down: –86.5 dBu

(90 dB Signal to Noise Ratio, ref +4 dBu)

Main Mix knob @ unity, channel Gain knobs @ unity: –84.5 dBu

Total Harmonic Distortion (THD)

(1 kHz @ 35 dB gain, 20 Hz–20 kHz bandwidth)

Mic pre @ insert:	0.0007%

Attenuation (Crosstalk)

(1 kHz relative to 0 dBu, 20 Hz–20 kHz bandwidth, Line in, 1/4" Main Out, Trim @ unity.)

Main Mix knob down:	–75 dBu
Channel Alt / Mute switch engaged:	–85 dBu
Channel Gain knob down:	–87 dBu

Frequency Response

(Mic input to any output.)

20 Hz to 60 kHz:	+0 dB/–1 dB
20 Hz to 100 kHz:	+0 dB/–3 dB

Equivalent Input Noise (EIN)

(Mic in to Insert Send out, max gain.)

150 ohm termination:	–129.5 dBu 20 Hz–20 kHz

Common Mode Rejection Ratio (CMRR)

(Mic in to Insert Send out, max gain.)

1 kHz:	better than –70 dB

Maximum Levels

Mic in:	+22 dBu
Tape in:	+16 dBu
All other inputs:	+22 dBu
Main Mix XLR out:	+28 dBu
All other outputs:	+22 dBu

Impedances

Mic in:	2.5 kilohms
Channel Insert return:	2.5 kilohms
All other inputs:	10 kilohms or greater
Tape out:	1.1 kilohms
All other outputs:	120 ohms

EQ

High Shelving	±15 dB @ 12 kHz
Mid Peaking	±15 dB @ 2.5 kHz
Low Shelving	±15 dB @ 80 Hz

Power Consumption

@120 VAC, 50/60 Hz, 25 watts

Fuse Rating

100-120V:	500 mA slo blo, 5 x 20 mm
220-240V:	250 mA slo blo, 5 x 20 mm

Dimensions (H x W x D)

11.2" x 11.9" x 3.0" (284 mm x 303 mm x 75 mm)

Weight

6.5 lb (3.0 kg)

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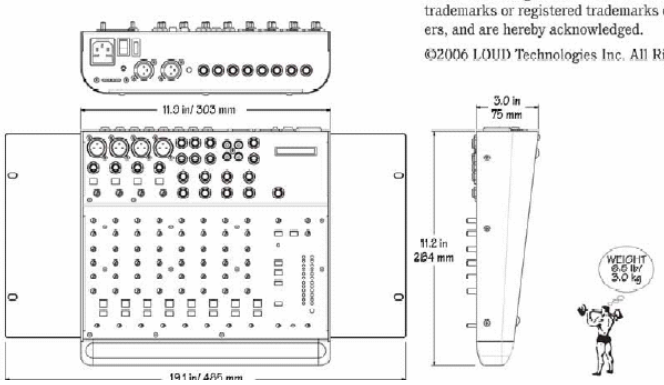

Especificaciones micrófono AKG D5

6 Specifications

Polar pattern:	supercardioid
Frequency range:	70 Hz to 20 kHz
Sensitivity:	2.6 mV/Pa (-52 dBV re 1 V/Pa)
Max. SPL for 1% / 3% THD:	147 / 156 dB SPL
Equivalent noise level:	18 dB(A) to DIN 45412
Impedance:	≤ 600 ohms
Re commended load impedance:	≥ 2000 ohms
Connector:	3-pin XLR
Finish:	matte gray-blue
Size:	length: 185.2 mm (7.3 in.); diameter: 51 mm (2 in.)
Net weight:	340 g (12 oz.)
Shipping weight:	655 g (1.45 lbs.)
Patents:	Varimotion varying-thickness diaphragm for dynamic transducers (patents nos. AT 403.751, US 6.185.809, DE 814.637, DK 814.637, FI 814.637, FR 814.637, GB 814.637, IT 814.637, NL 814.637)

This product conforms to the standards listed in the Declaration of Conformity. To order a free copy of the Declaration of Conformity, visit http://www.akg.com or contact sales@akg.com.