

stereo mixer **XD13**



XD13 / AD52
12 inputs / 8 channels
(4 mono + 4 stereo/mono)

stereo powered mixer

AD52

AD52 powered
180 + 180 Watts



processor controlled mixers with built-in 16 programs stereo effects processor

Maximum ease-of-use and flexibility in a space-saving package with a built-in powerful stereo effects processor make them ideal for one-man bands, keyboardists, small bands.

The entire audio circuitry relies entirely on surface-mount technology on 4-layer circuit boards, improving both long-term reliability and noise rejection, along with EMC behaviour.

The built-in effects processor, based on a 56-bit DSP, has 18-bit Delta-Sigma converters on board and it comes loaded with plenty of useful algorithms and a Parameter control, to easily adapt them on the fly during the show.

Montarbo



Starting from 16 basic presets that you can freely alter, it lets you create an endless variety of diverse effects.

For those who still don't love the art of wiring the AD52 adds a MosFet power amp to the box. So much, in such a little space.

XD13 stereo mixer

ENGLISH

• MONO INPUT CHANNELS

balanced XLR MIC inputs; unbalanced LINE inputs on 1/4" jacks combined with INSERT-points to process mic signals independently; wide range GAIN pot; peak LED (CL); 3-band EQ (HF-MF-LF); AUX/monitor send (pre-fade, post-eq); effect send (post-fade, post-eq); PAN control; 60 mm volume fader.

• STEREO INPUT CHANNELS

they feature 2 unbalanced line inputs (L/R LINE) on jacks and one balanced XLR MIC input.

• STEREO EFFECTS PROCESSOR

the built-in stereo effects processor (56-bit DSP with 18-bit Delta-Sigma conversion) with **16 programs**, each freely alterable to create an endless variety of effects, features: program number LED display (shows the number of the currently selected program); PROGRAM selection keys; peak (CL) LED indicator; effect ON switch with LED indicator; PARAMETER control (allows to alter the parameters of the 16 basic presets); AUX send (pre-fade); TONE control; stereo balance (BAL); 60 mm volume fader; footswitch jack (EFF.FT/SW) for remote control of the built-in effect processor.

• MASTER SECTION

external effect send (EFF SEND) with jack output and level control; **stereo return** with jack inputs (EFF RETN L/R), aux control (EFF TO AUX), L/R balance (EFF BAL) and level control (EFF RETN); **master L-R outputs** with 12-segment output level bargraph meters and 60mm volume faders; **auxiliary output** with jack socket (AUX) and volume control (AUX MASTER); L/R INSERT sockets for auxiliary equipment or for additional external power amplifiers; L/R TAPE IN/OUT with TAPE IN volume; stereo phones output with level control (PHONES VOL); PROCESSOR on/off switch, with LED indicator: this button activates an internal processor allowing to obtain a 'full-bodied' sound even with a soft sound level (very useful when performing in clubs, small venues etc.).

The AD52 has all the above features but it also includes 2 MosFet power units (180+180W) with XLR and Jack output sockets, cooling fan and advanced protection circuitry providing a clean, reliable power with maximum accuracy even at the highest levels.

ITALIANO

• CANALI DI INGRESSO MONO

ingressi MIC bilanciati XLR; ingressi LINE sbilanciati su Jack, utilizzabili anche come INSERT; regolazione del guadagno (GAIN); indicatore LED di picco (CL); EQ a 3 bande (HF-MF-LF); mandata AUX/monitor (pre-fade, post-eq); mandata effetti (post-fade, post-eq); controllo panorama (PAN); fader da 60 mm.

• CANALI DI INGRESSO STEREO

a differenza dei canali mono, oltre all'ingresso XLR bilanciato per microfono dispongono di 2 ingressi jack di linea (LINE L/R) sbilanciati.

• PROCESSORE DI EFFETTI STEREO

il processore incorporato, (DSP a 56-bit con conversione Delta-Sigma a 18 bit) con **16 programmi**, i cui parametri sono modificabili a piacere in tempo reale consentendo di creare infiniti diversi effetti, dispone di: display numerico a LED che indica il numero corrispondente al programma selezionato; pulsanti per la selezione dei programmi (PROGRAM); indicatore LED di picco (CL); pulsante ON, con indicatore LED; controllo PARAMETER (consente di modificare i parametri dell'effetto scelto); mandata AUX (pre-fade); controllo di TONO; bilanciamento L/R (BAL); fader da 60 mm; presa jack per interruttore a pedale (EFF FT/SW).

• SEZIONE MASTER

mandata effetto esterno (EFF SEND) con uscita jack e controllo di livello; **ritorno effetto stereo** con ingressi jack (EFF RETN L/R), mandata aux (EFF TO AUX), bilanciamento L/R (EFF BAL) e controllo di livello (EFF RETN); **uscite master L-R** con rampe di LED a 12-segmenti per il livello di uscita e fader di volume da 60mm; **uscita ausiliaria** con presa jack (AUX) e volume indipendente (AUX MASTER); prese INSERT L/R per accessori esterni o casse amplificate; ingresso/uscita stereo per registratore L/R TAPE IN/OUT, con volume d'ingresso (TAPE IN VOL); uscita cuffia stereo, con controllo di livello (PHONES VOL); interruttore PROCESSOR, con indicatore LED: attiva un processore in grado di modificare il contenuto armonico delle uscite master L ed R consentendo di ottenere un suono 'corposo' anche a livelli di ascolto bassi (molto utile quindi per piano-bar e simili).

Oltre a queste dotazioni AD52 incorpora due finali di potenza a MosFet (180+180 W), che dispongono di uscite XLR e Jack, ventilazione forzata e sofisticati circuiti di protezione per assicurare la massima precisione sonora anche alle massime potenze.

DEUTSCH

• MONO EINGANGSKANÄLE

symmetrische XLR-MIC-Eingänge; unsymmetrische LINE-Eingänge (1/4" Klinken-Buchsen), die auch als INSERT benutzbar sind; GAIN-Poti; Übersteuerungs-LED (CL); 3-Band-Equalizer (HF-MF-LF); AUX/Monitor-Weg (pre-fade, post-eq); Effekt-Weg (post-fade, post-eq); PAN-Potentiometer; 60 mm Fader.

• STEREO EINGANGSKANÄLE

mit den gleichen Features, nur 2 unsymmetrische Line-Klinken-Eingänge (LINE L/R) plus symmetrischer XLR-Eingang für Mikrofon.

• STEREO EFFEKT-PROZESSOR

der eingebauter stereo Effektprozessor (56 Bit DSP mit 18 Bit Delta-Sigma-Konverter) mit **16 Programmen**, die wunschgemäß geändert werden können, verfügt über: LED-Anzeige des gewählten Programms; Drucktasten PROGRAM für die Auswahl der Programmen; Peak LED-Anzeige (CL); ON-Schalter mit LED Anzeige; PARAMETER Regler (ermöglicht die Parameter des gewählten Programms zu ändern und damit unzählige, unterschiedliche Effekte höchster Qualität zu erzielen); AUX-Send (pre-fade, post-EQ); Klangregler (TONE); Balance-Regler (BAL); 60 mm-Fader; Klinkenbuchsen für den Anschluß eines Ein/Aus-Fußschalter (EFF FT/SW).

• SUMME-TEIL

Extern-Effekt-Send (EFF SEND) mit Klinkenausgang und Lautstärkereglern; **Stereo-Effekt-Return** mit Klinkeneingänge (EFF RETN L/R), **Aux-Send** (EFF TO AUX), L/R Balance-Regler (EFF BAL) und Lautstärkereglern; **L-R Master-Ausgänge** mit 12-Segment-Ausgangspegel-LED-Anzeigen und 60mm Lautstärkefader; **Aux-Ausgang** mit Klinkenbuchse (AUX) und unabhängigen Lautstärkereglern (AUX MASTER); INSERT L/R Klinkenbuchsen für den Anschluß von externen Geräte auf der Stereo-Summe oder um externe Verstärkung anzusteuern; L/R TAPE IN/OUT-Buchsen für Stereo-Tonbandgerät, mit Eingangsvolumen (TAPE IN VOL); Ausgang für Stereokopfhörer, mit eigenem Pegelkontrolle (PHONES VOL); PROCESSOR-Schalter: schaltet einen Prozessor ein, der einen besonders 'vollen' Klang selbst bei niedrigem Lautstärkepegel ermöglicht (sehr nützlich z. B. in Clubs, Piano-Bar o.ä.).

AD52 ist die Power-Version des XD13 mit 2 MosFet Endstufen (180+180 W). Er verfügt über XLR und Klinken-Ausgänge, Kühler und spezielle Schutzschaltungen die für optimale Klangpräzision, auch bei höchster Leistung sorgen.



AD52 stereo powered mixer



ESPAÑOL

• CANALES DE ENTRADA MONO

entrada microfónica (MIC) balanceada XLR; entrada de línea (LINE) desbalanceada jack, utilizable también como INSERT; regulación de GAIN; indicador LED de pico (CL); EQ de 3 bandas (HF-MF-LF); envío AUX/monitor (pre-fade, post-eq); control de la estereofonía (PAN); atenuador de 60 mm.

• CANALES DE ENTRADA ESTÉREO

entrada microfónica (MIC) balanceada XLR + 2 entradas jack (L/R LINE) para la señal de línea estéreo. Mismas dotaciones de los canales mono.

• PROCESADOR DE EFECTOS ESTÉREO

el procesador incorporado (DSP de 56 bit, conversión Delta-Sigma de 18 bit) con 16 programas cuyos parámetros pueden ser modificados en tiempo real según se desee, es dotado de: display numérico a LED (indica el número correspondiente al programa seleccionado); botones de selección de los 16 programas disponibles (PROGRAM); indicador LED de pico; botón para activar o desactivar el efecto (ON); control PARAMETER (permite modificar los parámetros del programa seleccionado y crear así una gama infinita de efectos); envío AUX (pre-fade); control de tono (TONE); control BAL por el balance del efecto estéreo en las salidas master L/R; atenuador de 60 mm; toma jack para pedal on/off (EFF FT/SW).

• SECCIÓN MASTER

envío de efecto externo (EFF SEND) con salida jack y con control de nivel; retorno estéreo con entradas jack (EFF RETN L/R), envío aux (EFF TO AUX), balance en las salidas master L/R (EFF BAL) y control de nivel (EFF RETN); salidas master L/R con rampas de LED para el nivel de salida y atenuadores de 60mm; salida auxiliar con toma jack (AUX) y volumen independiente (AUX MASTER); tomas INSERT L/R para conectar accesorios externos o cajas amplificadas; tomas L/R TAPE IN/OUT para grabador estéreo con volumen de entrada (TAPE IN VOL); salida para casco estéreo, con control de nivel (PHONES VOL); botón PROCESSOR para activar el procesador incorporado, que permite obtener un sonido 'corpudo' también con volúmenes bajos.

Además de estas dotaciones, el AD52 tiene dos amplificadores MosFet (180 + 180 W) incorporados que tienen salidas XLR y jack, ventilación forzada y están controlados por sofisticados circuitos de protección para asegurar la máxima precisión sonora incluso a las potencias máximas.

FRANÇAIS

• CANAUX D'ENTRÉE MONO

entrée MIC symétrique XLR; entrée LINE asymétrique (sur jack), utilisable en tant que INSERT; réglage du GAIN; LED de crête (CL); égaliseur à 3 bandes (HF-MF-LF); départ AUX/moniteur (pre-fade, post-eq); départ effet (post-fade, post-eq); contrôle PAN; fader de volume de 60 mm.

• CANAUX D'ENTRÉE STÉRÉO

entrée MIC symétrique XLR + 2 entrées jack asymétriques (L/R LINE) pour les signaux ligne stéréo. Mêmes contrôles des canaux mono.

• PROCESSEUR D'EFFETS STÉRÉO

le processeur d'effets stéréo incorporé (DSP de 56 bit, conversion Delta-Sigma à 18 bit) avec 16 presets modifiables à loisir en temps réel, est doté de: display numérique à LED (indique le numéro correspondant au programme sélectionné); 2 poussoirs de sélection des programmes (PROGRAM); indicateur LED de saturation; poussoir ON avec voyant LED; contrôle PARAMETER (permet de modifier selon vos goûts les 16 programmes de base et créer d'innombrables effets); départ AUX (pre-fade); contrôle de tonalité (TONE); balancement stéréo (BAL); fader de 60 mm; prise jack (EFF FT/SW) pour interrupteur à pédale.

• SECTION MASTER

départ effet externe (EFF SEND) avec sortie jack et contrôle de volume; retour stéréo avec entrées jack (EFF RETN L/R); départ aux (EFF TO AUX); balancement stéréo (EFF BAL) et contrôle de niveau; sorties master L/R avec crémètres à LED pour les niveaux des sorties et faders de volume de 60mm; sortie auxiliaire avec prise jack (AUX) et volume indépendant (AUX MASTER); prises INSERT L/R pour accessoires externes ou enceintes amplifiées; entrées/sorties stéréo pour magnetophone (L/R TAPE IN/OUT), avec volume d'entrée (TAPE IN VOL); sortie casque stéréo avec contrôle de niveau (PHONES VOL); poussoir PROCESSOR pour activer le processeur incorporé que permet d'obtenir un son 'corsé' même à un bas niveau d'écoute.

En plus, AD52 est doté de 2 amplificateurs MosFet (180 + 180 W) intégrés, processorisés, avec sorties Jack et XLR, aération forcée et circuits de protection pour assurer une précision sonore absolue même aux puissances maximum.



XD13 AD52

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Montarbo



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16 PROGRAMS / EFFECTS INDEX

0 FAST ECHO Is basically a very short slap-back delay.
The PARAMETER control allows to change the delay time.

1 SLOW ECHO Again, but with longer delay times, hence a more 'spacious' flavor to it.
The PARAMETER control has the same function.

2 SMALL HALO A digital 'clone' of the effect built in the Montarbo reverb units of the sixties, a vintage classic that never went out of fashion.
The PARAMETER control allows to change the 'length' of the effect.

3 LARGE HALO Again the previous effect, but slightly more 'open'.
Same function for the PARAMETER control.

4 PING-PONG Basically an auto-panned delay, popular on many rock hits, the samples are being routed alternatively to full left and full right master.
The PARAMETER control allows to change the delay time, i.e. the length of the sample.

5 REVERSE REVERB Unmistakably a 'must' of many 80's records, starts at low level, builds up and quits abruptly. Usually served with percussion.
The PARAMETER control allows to change the reverb time, hence the duration of the effect.

6 EARLY REFLECTIONS Generates the initial part of the reverb without the decaying 'tail' of the effect. It makes for thicker and more aggressive sound without increasing its decay time. Usually it is used to colour vocals or horns solos in contemporary productions.
The PARAMETER control adjusts the time between early reflections.

7 ROOM REVERB The typical short reverb, great with percussions.
The PARAMETER control changes the room size.

8 HALL REVERB Simulates a much bigger space, as the name implies.
Again, the PARAMETER control changes the room size.

9 VOICE REVERB Specially tailored to support and enrich the lead vocals.
The PARAMETER control sets the ambient flavor to it.

A FAST ECHO + REVERB A fast, short slap-back delay combined to a reverb in a vocal oriented patch.
The PARAMETER control sets the reverb time.

B SLOW ECHO + REVERB Similar to A, but delay time is longer, thus plays 'slower' and with longer samples.

C PITCH CHANGE Alters the pitch in real time.
The PARAMETER control selects one among four different transpose functions.

D DUAL PITCH CHANGE A real 'harmonizing' effect capable to add two further voices to a monophonic source, panned full left and full right.

E DETUNE 1 Slightly alters the source tuning to simulate a 'doubling' effect.
The PARAMETER control adjusts the frequency shift to make the effect subtler or more noticeable.

F DETUNE 2 It is great with guitars, similar to a Chorus effect, but sometimes even more effective.
The PARAMETER control adjusts the frequency shift.

XD13 / AD52 MIXER SECTION

• **Mono input channels:**
Micro (sensitivity / impedance) - 60dB / 2,2 kΩ
Line (sensitivity / impedance) - 40dB / 10 kΩ
Insert-in (sensitivity / impedance) 0dB / 10kΩ
Channel gain range 30dB

• **Stereo input channels:**
Micro (sensitivity / impedance) - 60dB / 2,2 kΩ
Line L/R (sensitivity / impedance) - 46dB / 10kΩ
Channel gain range 34dB

• **All channels:**
Equalization

Equivalent input noise
Peak LED indicator
Fader (throw / attenuation)

• **Stereo digital effects processor**
A-D and D-A conversion
Internal DSP
Bandwidth
THD
SNR

• **External effect send**
Nominal level
Impedance
Max output level

• **External effect return**
Nominal level
Impedance
Max input level

• **Master outputs**
Nominal level
Output impedance
Max. output level
Min. load impedance
Insert-in/out: nominal level
Frequency response
THD
SNR

• **Aux output:**
Nom. level / Max. level

• **Tape in: Nominal level**

• **Tape out: Nominal level**

• **Headphones: Load impedance**

• **Dimensions (W x H x D):**
XD13: 49,5 x 10 x 41 cm
AD52: 49,5 x 16 x 41 cm

• **Weights:**
XD13: 5,5 kg
AD52: 13,5 kg

AD52 AMPLIFIER SECTION

Amplifiers 2, MosFet (AB class)
Total output power (Watt continuous) 180 + 180 W / 4Ω
Total output power (Watt peak) 320 + 320 W / 4Ω
Frequency response 20Hz + 30kHz ± (+0 / -2dB)
THD < 0,1%
Protections speaker protection fuse, delayed power-up sequence, forced cooling, electronic short circuit protection, automatic trouble-shooting.

