

ing consoles

stereo powered mixer

716S

716S

16 inputs / 12 channels

(8 mono + 4 stereo)

2 x 160 programs stereo effects
processors (56-bit twin DSP)

350 + 350 Watts



stereo powered mixer with built-in 2 x 160 programs stereo multieffects processor

Thanks to simplified wiring, fast setup, easy of transportation, the one-in-all package is a truly practical and effective solution to musician requirements. Compact, thus easy to install and operate everywhere, 716S powered mixing

Montarbo



console can be hooked up to your system in a breeze: it only takes an AC outlet and two loudspeaker cables to set up a full system with

716S stereo powered mixer

ENGLISH

• MONO INPUT CHANNELS:

balanced XLR MIC inputs (switchable phantom on 4 channels) and jack LINE inputs; gain control; 3-band EQ with parametric mid control; 2 A-B/monitor sends; 2 effect sends; PAN control; peak LED indicator; 60 mm fader.

• STEREO INPUT CHANNELS

jack LINE inputs; GAIN control; 3-band EQ; 2 A-B/monitor sends; 2 effect sends; stereo balance control; peak LED indicator; 60 mm fader.

• TWO STEREO MULTIEFFECT PROCESSORS:

the 2 built-in stereo multieffect processors, each with 160 programs and independent controls are based on a 56-bit DSP with 24-bit Delta-Sigma conversion. Program number LED display; PROGRAMS selection key; 5-segment input level LED arrays; TONE controls; A-B/monitor sends (pre-fade); ON/off button with LED indicator; stereo balance (BAL) controls; 60 mm volume faders; FOOTSWITCH jacks for remote control of the 2 effects processors.

• MASTER SECTION:

10-band stereo graphic EQ; 2 external effect sends with level controls; 2 stereo return (assignable to the aux and L/R master outputs with independent controls); 2 monitor lines each with 4-band equalizer and volume fader; MONO output, with independent volume control; L/R INSERT sockets for external auxiliary equipment or further external amplification (pre-out/main-in); L/R tape TAPE IN/OUT with TAPE IN level control; stereo PHONES OUT, with level control. The 2 built-in power amps (350+350 W) are fitted with XLR and Jack sockets (wired in parallel) and feature electronic and thermal protections, delayed power-up sequence, automatic trouble-shooting and forced cooling.

• MONO EINGANGSKANÄLE:

symmetrische XLR-MIC-Eingänge (schaltbare Phantomspeisung auf 4 Kanäle) und unsymmetrische LINE-(Klinken)-Eingänge; GAIN-Potentiometer; 3-Band-Equalizer mit parametrischen Mitten; 2 A-B/Monitor-Weg; 2 Effekt-Wege; PAN-Potentiometer; Peak-Anzeige; 60 mm Fader.

• STEREO EINGANGSKANÄLE:

unsymmetrische LINE-(Klinken)-Eingänge; GAIN-Potentiometer; 3-Band-Equalizer; 2 A-B/Monitor-Wege; 2 Effekt-Wege; Stereo-Balance-Regler; Peak-Anzeige; 60 mm Fader.

• ZWEI STEREO MULTIEFFEKT-PROZESSOREN:

Die 2 eingebauten stereo Prozessoren, je mit 160 Programmen, basieren auf einen 56-Bit DSP und verfügen über 24 Bit Delta-Sigma Konverter; LED-Anzeige der Speicherplatz nummer; Programmwahl-Tasten; 5-Segment Eingangpegels-LED-Anzeige (INPUT LEVEL); Klangregler (TONE); A-B/Monitor-Send (pre-fade, post-EQ); Balance-Regler (BAL); ON/off-Schalter; 60 mm-Fader; Klinkenbuchsen für Ein/Aus Fußschalter.

• SUMME-TEIL:

10-Band-Stereo Graphic EQ; 2 Extern-Effekt-Sends mit unabhängigen Pegelregler; 2 Stereo-Return (mit separaten Steuerungen für die L/R und Aux-Sends); 2 A-B/Monitor-Ausgänge je mit 4-Band-Klangregelung und Lautstärkfader; ein MONO-Ausgang mit

unabhängigem Lautstärkereger (auch als dritter Monitorausgang einsetzbar); 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); Ausgang für Stereo Kopfhörer, mit Pegelkontrolle (PHONES VOL).

Die 2 Endstufen (350 + 350 W) verfügen über XLR-und Klinken-Buchsen (parallel), Sicherungen, Einschalt-Verzögerungs-Relais, automatische Selbstdiagnose, verstärkte Kühlung.

• CANALES DE ENTRADA MONO:

entrada microfónica (MIC) balanceada XLR (phantom activable en 4 canales) y línea (LINE) desbalanceada jack; regulación de GAIN; EQ de 3 bandas con control paramétrico de los medios; 2 envíos monitor A/B; 2 envíos de efectos; control de la estereofonía (PAN); indicador LED de pico y atenuador de 60 mm.

• CANALES DE ENTRADA ESTEREO:

entrada línea (LINE) desbalanceada jack; regulación de GAIN; EQ de 3 bandas; 2 envíos monitor; 2 envíos de efectos; control del balance (BAL); indicador LED de pico y atenuador de 60 mm.

• DOS PROCESADORES MULTIEFFECTO ESTEREO

los 2 procesadores incorporados, cada uno con 160 programas, son dotados de un DSP de 56 bit con conversión DeltaSigma de 24 bit. Display; botones PROGRAMS que permiten seleccionar los programas; 2 rampas de LED para el nivel de entrada; controles de tono (TONE); envíos A-B/monitor (pre-fade); controles BAL por el balance de los efectos estéreo en las salidas master L/R; pulsadores ON/off; atenuadores de 60 mm; tomas jack para conmutadores de pedales (FOOTSWITCH).

• SECCIÓN MASTER

ecualizador gráfico estéreo de 10 bandas; 2 envíos de efectos externos con controles de nivel; 2 retornos estéreo (dirigibles a las salidas master y monitor con mandos independientes); 2 salidas monitor dotadas de ecualización de 4 bandas y atenuador de volumen; salida MONO con volumen independiente (utilizable también como tercera línea monitor); tomas INSERT L/R IN/OUT para conectar accesorios externos o cajas amplificadas; tomas L/R TAPE IN/OUT para grabador estéreo, con volumen de entrada (TAPE IN); salida para casco estéreo, con control de nivel (PHONES VOL). Los dos amplificadores incorporados (350+350 W) tienen salidas XLR y jack, protecciones térmicas y electrónicas, relé para la inserción retardada de la carga, autodiagnóstico en las dos salidas y ventilación forzada.

FRANCAIS

• CANAUX D'ENTRÉE MONO

entrées MIC symétriques XLR (phantom sur 4 canaux) et LINE asymétriques Jack; réglage du GAIN; égaliseur à 3 bandes avec médium paramétrique; 2 départs moniteurs; 2 départs effets; potentiomètre PAN; LED de crête et fader de 60mm.

• CANAUX D'ENTRÉE STÉRÉO

entrées LINE asymétriques Jack; réglage du GAIN; égaliseur à 3 bandes; 2 départs moniteurs; 2 départs effets; balance stéréo; LED de crête et fader de 60 mm.

• DEUX PROCESSEURS MULTIEFFETS STÉRÉO

les 2 multieffets stéréo intégrés (E1 et E2), chacun à 160 programmes, sont basés sur un puissant DSP à 56-bit avec conversion Delta Sigma à 24bit. Affichage; bouton PROGRAMS; rampes niveaux d'entrées à 5 LED; contrôles de tonalité (TONE); départs A-B/monitor (pre-fade); balancement stéréo (BALANCE); poussoirs ON; faders de 60 mm; prises jack FOOTSWITCH pour interrupteurs à pédale des deux effets.

• SECTION MASTER:

EQ stéréo à 10 bandes; 2 départs effets externe avec contrôles de volumes; 2 retours effet stéréo (dirigeables vers les sorties aux et master avec contrôles indépendants); 2 départs moniteurs, avec égalisation à 4 bandes et tirettes de volume; sortie MONO avec volume indépendant (utilisable en tant que ligne moniteur supplémentaire); prises INSERT L/R pour accessoires externes (peuvent être utilisées comme sorties de ligne pour relier des enceintes amplifiées); L/R TAPE IN/OUT pour magnétophone stéréo, avec volume d'entrée (TAPE IN); sortie PHONES stéréo avec contrôle de niveau (PHONES VOL). Les deux amplis incorporés (de 350+350 W) sont dotés de sorties Jack et XLR en parallèle, protections électroniques, relais pour insertion retardée de la charge, circuit autodiagnostique, ventilation forcée.



DEUTSCH

716S powered mixer

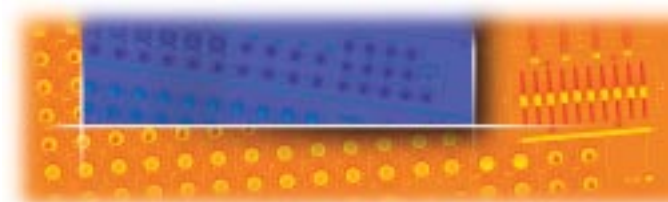
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SPECIFICATIONS

2 x 160 PROGRAMS / EFFECTS INDEX

- 00 → 09 STEREO GEN.** Adds a short delay to the signal to create a pseudo stereo effect out of mono sources.
- 10 → 29 HALO** It's a digital recreation of the old magnetic Montarbo reverb. A typical 60s effect, with a real vintage character.
- 30 → 39 ECHO** Classic multiplex effect. Delay time increases with program number.
- 40 → 49 ECHO + REV.** Delay and reverb blended together make for the impressive effect you can listen on most contemporary productions).
- 50 → 59 VOICE REV.** Reverbs specially tailored to enhance vocals' character.
- 60 → 69 PERCUSSION REV.** Ambience effects that enrich both acoustic and electronic percussions.
- 70 → 79 HALO + REVERB** Halo and reverb effects blended together.
- 80 → 88 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.
- 89 BOUNCE** Repeats start widely spaced to become closer and closer.
- 90 → 99 EARLY REFLECTIONS** Adds early reflections without the decaying reverb. Useful to thicken many different sounds.
- A0 → A9 STEREO FLANGER** It may be considered as a very intense chorus, with two voices crossing their stereo image and with feedback acting as 'comb filter'. The frequencies corresponding to the filter's notches and peaks change continuously, thus producing the typical flanging sound.
- B0 → B9 STEREO CHORUS** It produces a warm and rich sound. Three voices are derived from the input signal and are sent to the Left and Right channels and to the center. The result is that even the thinner voice will sound like an ensemble. It is ideal to enliven a guitar accompaniment and to 'fatten' a voice.
- C0 → C9 DETUNE** Slightly alters the tuning of the source to simulate a 'doubling' effect with increased tuning alterations.
- D0 → D5 DUAL PITCH** A wonderful 'harmonizer' with two voices trasposing the input signal pitch in real-time. Your voice will be automatically accompanied by a chorus.
- D6 → D9 SINGLE PITCH** Harmonizer with one voice trasposing the input signal pitch in real-time.
- E0 → E9 PITCH CHANGE + REV.** It's the combination of the two effects which most of all let your voice sound warmer and thicker. Beside your voice, the Pitch Change provides a voice in the center of the stereo image. To the resulting harmonizer effect a warm Plate type Reverb effect, particularly suited for voice, is added in cascade.
- F0 → F9 REVERSE REVERB** Unmistakably a 'must' of many 80's records, starts at low level, builds up and quit abruptly. Usually served with percussion.

- **Mono input channels:**
 - Micro (sensitivity / impedance) 8
 - Line (sensitivity / impedance) - 60dB / 2,2 kΩ
 - Phantom power supply - 30dB / 33 kΩ
 - Channel gain range 48 V
 - Equalization 30dB
- **Stereo input channels:**
 - Line L/R (sensitivity / impedance) HF : ±20dB @ 15kHz
 - Channel gain range MF (freq.): 0,18 ÷ 3kHz
 - Equalization MF (level): ±15dB
 - LF : ±20dB @ 50Hz
- **All channels:**
 - Equivalent input noise -126dB
 - Peak LED indicator + 16dB, 6dB before clipping
 - Fader (throw / attenuation) 60mm / > 80dB
- **Dual Multieffect DSP**
 - A-D and D-A conversion 24 bit Delta/Sigma conversion
 - Internal DSP 56 bit
 - Bandwidth 40Hz ÷ 15kHz
 - THD < 0,1%
 - SNR > 98dB
- **External effect send**
 - Nominal level 2
 - Impedance -10dB
 - Max level 600 Ω
- **External effect return (stereo)**
 - Nominal level + 20dB
 - Impedance 2
 - Max level -10dB
- **Master outputs**
 - Nominal level 10kΩ
 - Impedance + 20dB
 - Max level 2
- **L/R, Mono out**
 - Nominal level 0dB
 - Impedance 100 Ω
 - Max. level + 22dB
 - Min. load impedance 600 Ω
 - Frequency response 20Hz ÷ 30kHz ±2dB
 - THD < 0,03%
 - SNR 80dB
 - Stereo graphic equalizer 31-63-125-250-500 Hz
- **Monitor outputs:** Nom. level / Max. level 0dB / + 20dB
- **L/R Insert outputs:** Nom. level / Max. level 0dB / +22dB
- **Tape in:** Nominal level - 20dB
- **Tape out:** Nominal level - 10dB
- **Headphones:** Load impedance 200 ÷ 600Ω
- **Built-in amplifiers:**
 - 2 (class AB)
 - Total output power (Watt continuous) 350 + 350 W / 4Ω
 - Total output power (Watt peak) 650 + 650 W / 4Ω
 - Frequency response 30Hz ÷ 25kHz ± 1dB
 - THD < 0,1% / 350 W / 4Ω
 - Protections thermal, electronic, delayed power-up sequence, automatic trouble-shooting, forced cooling.
- **Dimensions (W x H x D):** 72 x 17 x 61 cm
- **Weight:** 25 kg

RECOMMENDED COMBINATIONS

powered mixer	passive enclosures		
	415	412	260
716	2/4	4	4

Above mentioned combinations are 'technically feasible' but can not consider all the different situations and consequent requirements. Use them as a reference for the choice of the speaker enclosure most suitable for your needs (...of power, features, dimensions, weight).

