

DMX-P01

Portable digital audio mixer



Overview

Electronic News Gathering (ENG) and Electronic Field Production (EFP) applications deserve outstanding audio to complement the great-looking pictures obtainable with today's digital video cameras.

With full 24-bit processing and 48/96kHz selectable sampling, the new DMX-P01 Portable Digital Mixer delivers studio-quality mixing of up to four microphone or line sources in an incredibly compact, go-anywhere package.

Brilliantly engineered with an intuitive control panel for fast, easy, accurate adjustment, the DMX-P01 packs a host of features for in-the-field use. On-board digital limiter/compressors assure stable levels when contending with real-life sound sources. Up to ten "scene memories" recall mixer settings for instant re-configuration in multiple shooting scenarios, and control settings can be locked against inadvertent adjustment.

Sound recordists and camera crews will also appreciate the convenience of video-friendly features like flexible meter scaling and simple matching of mixer output and camera audio return levels.

Designed with the user in mind

The DMX-P01 has been designed with the user in mind. The

controls and functions are all logically placed so as to make the operation as easy as possible. This digital mixer brings with it the use of menus that allow the user quick access to settings and functions. The result is a mixer being a pleasure to own and use.

Digital future

The DMX-P01 has all the benefits of an analogue mixer with the added advantage of digital processing and digital output. This provides excellent sound quality coupled with varied connectivity to other digital equipment that is becoming the requirement in this digital age.

A memory of its own

The DMX-P01 has its own memory for the user to store and recall settings. No longer do you have to commit this to your own memory or have to remember where you wrote it down. Several users can store their own preferences according to the type of work being carried out. This is a huge benefit to production and hire companies alike.

On the level

The user is provided with six types of metering scale. These can be recalled whenever required. Using this mixer in whatever country you may find yourself provides the metering scale that is normally worked to. This puts the user on a level of flexibility not seen before. No more quick or rough conversions required.

Features

High sound quality with digital technology

In order to provide high sound quality for ENG and EFP applications, the DMX-P01 offers full digital audio processing - 24-bit A/D and D/A converters, 32-bit internal digital processing for maximum throughput and selectable sampling rate of either 48kHz or 96kHz

High quality digital limiter/compressor

By using the digital limiters and compressors, the DMX-P01 can provide high quality sound from a small package. A sound engineer can select suitable parameters easily on the LCD/Menu display Input Limiter, Selectable threshold Output Limiter, Selectable threshold Output Compressor, Selectable threshold, ratio, attack time, and release time.

Full parameter controls on front panel

All of the controls are cleanly organized and logically placed on the front panel. Parameters that are used less frequently are stored internally and accessed only when needed. Using the front-panel controls and easy-to-read LCD allows full control of every parameter without the need to remove the unit from its carrying case. Backlight for low-light conditions, LCD Heating for low-temperature conditions.

Panel-Lock and Parameter-Lock Features

Safeguards against inadvertent operation. The Panel-lock feature, which can be applied to all of the controls, will not allow settings to be changed. In addition, the Parameter-Lock feature also avoids accidental parameter changes.

Flexible Meter Scales

Because the DMX-P01 is a digital mixer, the meter calibration can be easily changed without replacing the entire meter display. Six easy-to-change meter scale sheets are supplied, VU, PPM1 (BBC-type), PPM2 (DIN-type), PPM3 (NORDIC-type), PPM4 (IEC-type1), and dBFS. Simply insert the desired scale sheet and select the appropriate meter type from the setup menu. The DMX-P01 displays audio levels according to the scale selected.

Camera-Audio Return-Level Check

The DMX-P01 enables the sound engineer to visually verify that mixer's audio levels match levels recorded to a camcorder tape, by using a camera return-level mode in the setup menu. The P01 simply sends a reference sine signal to the camcorder, and the

level difference between the mixer output and camcorder return signal is displayed with a marker. Then, a quick adjustment to the L/R master of the P01 or REC level of the camcorder to place the marker beneath a CENTER MARKER indicated on the LCD, and the level adjustment is completed.

Memory Function

Users can store and recall parameters from the setup menu. There are two memory functions: "Power-On Memory Recall", and "Scene Memory Recall" and "Power-On Memory Recall". : When the DMX-P01 is powered on, the system is capable of recalling parameters in three different ways (1) Default factory settings (2) The same settings as the last time the unit was used (Last memory) (3) The parameters of one specific scene memory (Scene No.0, 1, 2 etc.)

Scene Memory Recall. This feature allows users to recall up to ten user-defined parameter settings or the factory default settings. This is useful in situations where a single unit is required to serve multiple users or multiple shooting scenarios. The recallable parameters include: Level Meter Type, Low Cut Filter Frequency, Input Limiter, Output Compressor/Limiter-Link / M-S setup.

Digital cascade

For applications requiring additional inputs, the DMX-P01 can be cascaded using a digital connection between mixers. A benefit of digital cascading is that a sound quality is not degraded.

Digital Output

The DMX-P01 is equipped with digital outputs, which are used to send audio signal to digital equipment, such as DAT recorders. AES/EBU and S/PDIF coaxial interfaces are available.

Specifications

Audio Section

Mic Input	<p>Selectable mic -70 dBu to -30 dBu (max 0 dBu) or line level -30 dBu to +10 dBu (max. +24 dBu)</p> <p>Four XLR-3-31 (female) connectors</p>
Line Input	<p>Selectable mic -70 dBu to -30 dBu (max 0 dBu) or line level -30 dBu to +10 dBu (max. +24 dBu)</p> <p>Four XLR-3-31 (female) connectors</p>
Line Output	<p>Tape output (analog) 2 ch: -10 dBu, (max. -10 dBu) 01/8" TRS jack, unbalanced, 10 kohms or more</p> <p>S/PDIF (or Cascade output) (x1)/ IEC 60958 coaxial phono connector, unbalanced</p> <p>Master output (analog) 2 ch: +4 dBu, -10 dBu, -60 dBu, (max. +24 dBu) , XLR-3-32 (male) (x2)</p> <p>Digital output 2 ch: AES/EBU / XLR-3-32 (male) (x1)</p>
Frequency Response	20 Hz to 40 kHz +0.5/-3.0 dB (@ 96 kHz)
Total Harmonic Distortion (Line Input)	Less than 0.05%

to Line Output)

Signal Processing	Digital limiter and LCF on each input, digital limiter and compressor on main output
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General

Power Consumption	Internal: DC 12 V (eight AA-size alkaline batteries) External: DC 12 V via DC jack or DC 10 V to 15 V via XLR-4-32 (female)
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Power Requirements	DC 12V
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Dimensions (W x H x D) *[1]	266 x 68 x 206 mm 10 1/2 x 2 3/4 x 8 1/8 inches
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Mass	Approx. 4lb 13 oz Approx. 2.2 kg
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Supplied Accessories	Operation manual (x1) Operation instruction CD-ROM (1) Meter scale sheets (6 types) Feet (4) Battery holders (2) 12-pin multi-connector (1)
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Notes

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*[1] The values for dimensions are approximate.

Gallery

