Drawmer



D S 3 0 1 m i d i e x p a n d e r / g a t e



ingenuity (,Ind31'nju:It1) n., pl. -ties. 1. inventive talent; cleverness. 2. an ingenious device, act, etc.

igh quality general purpose Noise Gates and Expanders have become essential in most recording applications. As engineers continue to search for greater refinement, the need arises for extra facilities, higher specification and greater control potential.

The DS301 is an extremely versatile dual channel MIDI Expander/Gate, combining all the best features of a superb, 'ultra-fast' noise gate, with the

smoothness and flexibility of an intelligent expander. This combination allows precise control over the complete spectrum of audio material including percussive instruments, vocals and non-percussive instruments such as guitar, strings, horns and legato piano. The DS301 offers exceptionally low noise, low distortion circuitry and unique, comprehensive MIDI Control.

Facilities available on the DS301 include:

1 FREQUENCY SENSITIVE – Internal filters allow the gate to be made highly selective, resulting in stable triggering in the most demanding situations. Additional side-chain access is also provided, along with the ability to monitor the side chain using the KEY LISTEN switch.

2 AUTO ATTACK – Auto attack is essential when using an expander with vocals because the attack time of the vocal material is continuously changing. By sensing this change the DS301 is able to optimise its attack rate to exactly match the signal and so provide greater transparency.

3 ENVELOPE CONTROL – Attack, Hold and Release controls provide precise envelope shaping over a wide dynamic range.

PEAK ATTACK – This facility introduces gain to the signal for a short period of time, adding considerable 'punch' to the sound. Peak Attack is particularly effective with percussive material.

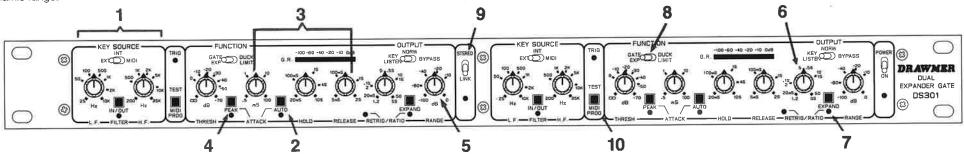
5 WIDE RANGE – The Range control allows up to 100dB of attenuation giving complete noise isolation.

6 RE-TRIGGER MASK – The setting of the Re-Trigger mask control allows the gate to open only once in an adjustable time period. This allows the engineer to 'lock out' noises which would otherwise cause un-wanted triggering. This control becomes RATIO when EXPAND is selected.

T EXPAND – This switch changes the internal circuitry to allow the unit to operate as a linear expander. In this mode the DS301 does not adopt the switching characteristics of a noise gate and so gives more musical results when processing non-percussive instruments including horns, strings, guitar, legato piano and vocals.

8 GATE/DUCK – Normal or inverted operation is available. DUCK is useful for voice-over applications and special effects and will also allow the DS301 to be operated as a Limiter.

9 STEREO LINK — Intelligent, mode dependent linking permits control of stereo signals.



10 MIDI – The comprehensive MIDI implementation and unique programming method provides the DS301 with the most powerful and yet easiest to use MIDI facilities available on a Noise Gate. The DS301 will recognise and transmit Velocity, Aftertouch and System Exclusive information as well as the basic channel and 'note on', 'note off' data. MIDI programming is extremely simple. Any data

(i.e. MIDI channel and note number) received on the MIDI input whilst in 'program mode' will be programmed into the DS301. The inclusion of a 'data present' LED further enhances its ease of use.

These features make the DS301 invaluable for modern production techniques involving the replacement of drum sounds etc. In Expansion mode not only will the DS301

generate 'note on' information when the threshold is exceeded, but will also derive MIDI Velocity and Aftertouch data from the level of the incoming audio signal (i.e. a snare drum). This allows all the nuances and subtleties present in the original signal to be transmitted over MIDI to the sampler/drum machine for a more natural and realistic performance.

- ULTRA FAST RESPONSE The DS301 can fully open in just 5μSec. (1μSec per 20dB) permitting
 the total capture of the very fastest leading edge of the signal.
- INPUT/OUTPUT The DS301 is provided with balanced inputs and outputs on XLR connections.

TECHNICAL SPECIFICATION: (All measurements taken at +4dBu operating level) Wideband 22Hz-22KHz CCIR ARM IEC A Q-Pk CCIR 20K Ω Input Impedance: -100dB -87dB +20dBu -90dB -97dB -98dB Maximum Input Level: RMS -87dB -96dB -96dB -99dB Output Impedance: 50Ω (balanced) Maximum Output Level +21 dBu 100Hz 1KHz 10KHz Distortion: (balanced) 0.04% 0.05% (Unity Gain, +4dBu input) 0.04% Bandwidth: <20Hzto 100-115V or 200-230V at 50-60Hz Power Requirements: 22KHz ±1dB 15 Watts <-86dB@ Crosstalk: 10KHz 116dB Dynamic Range:

LED DISPLAYS – A six element, three colour LED meter shows gain reduction from 0dB to 100dB.
 Other single LEDs indicate function status of Key Filter Bypass, MIDI Trigger, Peak Attack, Auto Attack, Re-Trigger, Expand Mode, Stereo Linking and 'Power On".

PRESENTED BY:

Contact your DRAWMER dealer for further information about other DRAWMER products.



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