

Drawmer



MX40

Punch Gate

The MX40 Punch Gate is a high value, professional quality four channel noise gate which offers the same sonic character and high technical specification that have made Drawmer the unchallenged world leader in gating technology. The MX40 is the first product to feature Drawmer's new proprietary **Peak Punch™** circuitry which adds unique dynamic enhancement to the leading edge of drums and percussive material, adding true 'punch' to the performance. A single **Trigger Frequency** control enables fast and easy set-up of 'frequency conscious' gating with **Key Listen**, allowing the user to 'tune-in' to the required frequency band.

'The Drawmer MX40 Punch Gate offers improved signal definition in complex mixes by isolating desired signal from unwanted background noise. It is especially important in sound reinforcement and the recording of short term sounds such as drums and percussion...'

TRIGGER FREQUENCY

The Trigger Frequency control is variable from 50Hz to 8KHz and enables the user to specify a frequency band that the gate 'listens to'. This feature makes the MX40 'frequency conscious' and enables the gate to react only to signals within a one octave band. The centre of that octave is determined by the frequency centre of the rotary Trigger Frequency control. This allows fast and simple set-up of frequency selective operation where unwanted signals are prevented from triggering the gate.

THRESHOLD

This rotary control sets the level at which the gate opens and may be set anywhere between -60dB to +20dB. All signals below Threshold will be reduced by -20dB or -90dB depending on the 'Range' control setting. All signals above Threshold will pass through the gate.

RELEASE

The Release time may be set from 10mS to 4S. This control determines how long before the gate closes. Special logic circuits within the MX40 incorporate 'envelope hold' constants that vary with the Release time settings to prevent 'chatter' when signals are on or around Threshold.

SLAVE LINK

The Link buttons are located between odd/even channels, and when depressed cause the channel on the right (Channel 2 or 4) to be controlled by the left-hand channel (Channel 1 or 3). In linked mode the red status LED beneath the Slave Link switch will be illuminated, and the Ext Key and Peak Punch™ LEDs of the slave channel will be extinguished. This indicates which controls of the slave channel are still operative.

LED DISPLAY

The signature Drawmer three LED 'traffic light' display is the industry standard for easy visibility of gate status. Red is below Threshold (closed), Yellow is at Threshold (opening or closing) and Green is above Threshold (open).



EXTERNAL KEY

Engaging this switch will offer a choice of two functions. The gate will be opened by either: (1) An external key source (if an external key source is plugged into the Key Input jack socket on the rear panel), (2) Channel 1 (if no key source is plugged into the rear panel). This makes it possible for selected gate channels to be opened by a single source. An LED below the switch illuminates when External Key is selected.

PEAK PUNCH™

Drawmer's proprietary Peak Punch™ circuitry adds very short term dynamic expansion to the leading edge of percussive material. Peak Punch™ has a near zero Attack time and enables gated signals to 'punch' through a mix without increasing long term signal level. The effect is one of greater signal definition of transient information. When Peak Punch™ is active an LED below the switch illuminates.

KEY LISTEN

Engaging this switch will enable the user to hear only the selected frequency band on the Trigger Frequency rotary control, or the External Key signal. An LED below the switch illuminates when in Key Listen mode.

RANGE

This button determines how much gain reduction is applied when the gate is fully closed. A setting of -90dB effectively silences the signal completely when the gate is closed, while the -20dB setting allows the signal to pass through the gate with only a 20dB decrease in gain.

FILTER IN

This disables the Trigger Frequency control.

BYPASS

This enables individual channel Bypass for A/B comparison. The Bypass position routes the input signal to the output with no processing and is effectively a gate 'on/off' button. When in Bypass mode an LED below the switch illuminates.

TECHNICAL SPECIFICATIONS

AUDIO MEASUREMENTS REFERENCE +4dBu OPERATING LEVEL

Connectors: Balanced XLR +4dBu (Pin 2+)
 Input Impedance: 20KΩ (bal)
 Key Input Impedance: 20KΩ (unbalanced)
 Input CMR: >-40dB
 Maximum Input Level: +21dBu
 Maximum Key Input Level: +21dBu
 Output Impedance: 50Ω (bal)
 Maximum Output Level: +21dBu
 Bandwidth: 10Hz to 22KHz-1dB

Noise	Wideband (worst case)	22Hz - 22KHz
AV	-100dB	-105dB
RMS	-104dB	-106dB

Distortion	100Hz	1KHz	10KHz
Gate open with +4dBu input	0.04%	0.02%	0.04%

Power Requirements: 115 Volt or 230 Volt, at 50-60Hz, 15 Watts
 Fuse Rating: 63mA for 230 Volt, 125mA for 115 Volt.
 CONFORMING TO BS EN 60127-2:1991 SHEET III
 Fuse Type: 20mm x 5mm, Class 3 Slo-Blo, 250 Volt working
 Case Size: 482mm (w) x 44mm (h) x 175mm (d)
 Weight (inc. packaging): 3.7Kg

The MX40's single Trigger Frequency control provides 'frequency conscious' operation and opens the gate only when a signal exceeds the Threshold you set within a specific and variable frequency band. This enables the gate to distinguish between a snare and a high hat, tom-toms versus cymbals or kick drum etc. Drawmer's new Peak Punch™ circuitry further improves definition by dynamically enhancing the leading edge of transient signals immediately after gate opening, so percussive sounds 'punch' through the mix. The controls of the MX40 are designed to reduce typically lengthy or complex gate set-up and automated circuitry means that only three rotary controls and six push buttons are required per channel.

Presented by:-

Drawmer

Charlotte Street Business Centre, Charlotte Street,
 Wakefield, West Yorkshire WF1 1UH England

Telephone: +44 (0)1924 378669

Fax: +44 (0)1924 290460

E-mail: sales@drawmer.co.uk

Web: http://www.proaudio.co.uk/drawmer.htm

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