



Musical
Products Group



noise gate/
line driver

Operation
Manual

MXR TECHNOLOGY

All products developed by MXR are a result of extensive experience in creative audio engineering. MXR products are designed by individuals who are actively involved in every facet of music, from performance through recording to playback. This sustained awareness of current trends and needs, combined with innovative design and construction techniques, allows MXR to produce carefully thought out products that are unique, versatile, and reliable. New ideas are constantly being tested, and existing products are subject to regular re-evaluation so you can be sure they reflect the latest technology.

There are MXR products to suit the needs of everyone involved with music. A wide variety of effects units, from a

basic stage unit to our highly sophisticated studio signal processors, are available to enhance any musical performance. Also included in the MXR line are products designed to improve the quality of sound in home stereo component systems. MXR is constantly striving to serve all areas of the world of music. The same care and attention is given to all MXR products, whether they are used in the home, in recording studios, or during live musical performances. All MXR products are designed and manufactured in the U.S.A. and carry a full warranty.

The MXR Noise Gate/Line Driver is a device designed to enhance the dynamic range of amplified musical instruments. The Noise Gate/Line Driver provides the musician with a portable means of solving the problem of background noise and hum, as well as a convenient high impedance/low impedance interface for direct line taps.

Although the Noise/Gate Line Driver has been designed for low power consumption, the battery will need replacement on occasion depending on frequency of use. To replace the battery, remove the four screws securing the bottom cover. Replace with a similar 9V transistor radio battery.

INTRODUCTION

Because the unit's input jack is also the power switch, the cord to the input should be unplugged when not in use to insure maximum battery life.

If the unit is to be shipped or stored for a long period of time (months), the battery should be removed to prevent damage from battery leakage.

OPERATION

The Noise Gate consists of a sensing circuit that constantly monitors the input signal's loudness and an electronic switch that, when activated, allows the input signal to pass through to the output. The sensor circuit activates the switch only if the input signal exceeds the level set by the THRESHOLD control. Since noise and hum caused by high gain elements such as distortion devices and compressors, or the inherent noise of echo and delay units, is lower than the level of actual music, THRESHOLD can be adjusted so the volume of the music will activate the Noise Gate while the lower level noise will not. With the Noise Gate, it is possible to effectively use a wide variety of modification devices that were once too noisy to be practical.

The Noise Gate function can be switched on and off to allow for special effects.

The Line Driver function is always active, providing an ideal interface between any low impedance input, such as a studio or PA mixing console, and a high impedance source, such as an instrument pickup. A standard 1/4" phone jack output and Cannon-type XLR connector are provided to allow maximum flexibility and the use of direct line taps. A line from a studio or PA console can be connected directly to the output of the Noise Gate/Line Driver while the musician monitors his sound through the phone jack output using a phone cord connected to an instrument amplifier. Both outputs are low impedance.

The setting of the THRESHOLD control determines the effectiveness of the Noise Gate. THRESHOLD should be turned clockwise to just past the point where the noise no longer activates the electronic switch. If the control is set too high, normal fluctuations in the instrument signal level will cause the Noise Gate to undesirably switch in and out.

It should be noted that while the Noise Gate is in the process of automatically switching in or out, some distortion may result. However, if the THRESHOLD control is adjusted properly, this transition will occur at signal levels too low to be heard in performance.

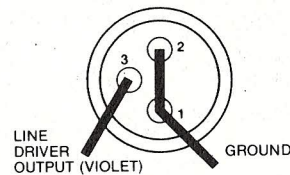
The footswitch disables the Noise Gate

APPLICATION

function but does not affect the Line Driver circuit.

NOTE:

Your Noise Gate/Line Driver is wired as shown. Pin 3 is the output, pins 1 and 2 are ground.



Some microphone or line inputs may require an alternate connection with pins 2 and 3 reversed or pin 2 disconnected.

SPECIFICATIONS

Maximum Input Level	+ 5 dBV
Maximum Output Level	+ 5 dBV
Input Impedance	500 k ohms
Output Impedance	100 ohms
Equivalent Input Noise	—105 dBV
T. H. D.	0.1% typical, 0 dBV, 1 kHz
Gating Threshold	—70 to —20 dBV, variable
Attack Time	1 ms
Release Time	100 ms
Power Requirements	9 volt battery, 1.7 ma

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FULL WARRANTY

All products in the MXR Musical Products Group are warranted to function properly for a period of one year from the date of purchase. If any unit fails to function properly within the warranty period, free repair, and the option of replacement or refund in the event MXR is unable to repair the unit, are MXR's only obligations. This warranty does not cover any consequential damages or damage to the unit due to misuse, ac-

cident, or neglect. MXR retains the right to make such determination on the basis of factory inspection. Products returned to MXR must be shipped prepaid. This warranty remains valid only if repairs are performed by MXR and provided that the serial number on the unit has not been defaced or removed. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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