Thank you for choosing the Genesis FET Microphone from MXL®.

Thank you for choosing the state of the art Genesis FET microphone from MXL®. Your new Genesis FET microphone was designed and engineered in the USA by our world class team of electrical and audio engineers, and is built for the most critical sound applications. The Genesis FET is a phantom powered, solid state microphone that replicates the finest characteristics of the Genesis Tube Microphone.

The MXL® Genesis FET features individually selected components, chosen for their superior sonic capabilities. Your Genesis FET will provide many years of outstanding service and will always ensure you get the finest quality recordings attainable.

To assist you in obtaining the best possible results from your MXL® Genesis FET microphone, we have provided some tips, tricks and answers to commonly asked questions.

We encourage you to review these materials.

Enjoy your new microphone!

The MXL Team

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**GENESIS FET Specs**

**Specifications**

<table>
<thead>
<tr>
<th>Type</th>
<th>Pressure gradient 32mm capsule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diaphragm</td>
<td>Gold-sputtered, 6 micron diaphragm</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>20 Hz - 20 kHz</td>
</tr>
<tr>
<td>Polar Pattern</td>
<td>Cardioid</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-30 dB re 1 V/Pa</td>
</tr>
<tr>
<td>Impedance</td>
<td>150 ohms</td>
</tr>
<tr>
<td>Max SPL for .5% THD</td>
<td>140 dB</td>
</tr>
<tr>
<td>S/N Ratio</td>
<td>81 dB (Ref. 1 Pa A weighted)</td>
</tr>
<tr>
<td>Equivalent Noise Level</td>
<td>13 dB (A weighted IEC 651)</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>127 dB</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>Phantom Power 48V +/- 4V</td>
</tr>
<tr>
<td>Weight</td>
<td>0.95lbs/431g</td>
</tr>
<tr>
<td>Size</td>
<td>47mm x 225mm / 1.85 inches x 8.86 inches</td>
</tr>
<tr>
<td>Metal Finish</td>
<td>Red body and Gold Grill</td>
</tr>
</tbody>
</table>

**Frequency Chart**

**Polar Pattern**

**Warranty**

MXL microphones are guaranteed against defects in material and workmanship for one year from date of purchase. Should you encounter any problem with this unit, promptly contact the company from which you purchased it for assistance. The original dated sales receipt will be necessary for any warranty claim. Do not send any unit directly to us without prior authorization from our service department! Warranty coverage is limited to repair or replacement (at our option) of the microphone. It does not cover incidental damages due to use of this unit, nor damage caused by accidental misuse of this product.
Features

Pop Filter

The Genesis FET comes with a custom 24k gold-plated pop filter which should be used any time the microphone is being used to record vocals. The pop filter not only eliminates plosives (those “popping Ps”), it helps collect condensation from one’s breath and protects and protects the microphone’s capsule from moisture in the process. Condensation on the microphone’s

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Capsule will cause the microphone to short circuit - resulting in the microphone cutting in and out of operation. Should this occur, you can leave the microphone uncovered, out in the open for approximately two weeks to thoroughly dry. This will likely rectify the problem. Afterward, you should always use a pop filter.

**Shockmount**

The Genesis FET comes with a custom shockmount specifically designed to handle its large size. Shockmounts de-couple the microphone from the mic stand and the environment. The shockmount will minimize floor noise as well as any noise induced by people handling the microphone stand. Shockmounts should be considered “standard equipment” for all recording applications. The shockmount can shift in shipment. Simply shift the nylon bands to center the microphone in the assembly. Be sure that the wire clamp does not rest on the chassis of the mount, as this impairs mechanical isolation. Slide the mount all the way to the rim of the microphone for the most secure hold.

**Microphone Cables**

The microphone cable can have a profound effect on the sound of any microphone. Even the finest microphones will sound poor if the interconnect cable allows noise to enter, or causes distortion and loss of information. We highly recommend exclusively using Mogami® cable.

*The front of the microphone is always indicated by the position of the cardioid pattern symbol.*
Recording the Piano

The piano is one of the most challenging instruments to record, and many problems stem from the quality and maintenance of the instrument itself. You’ll obtain the best results by using an instrument that has just been tuned and is in good mechanical condition.

The piano is generally recorded using close miking technique. Ideally, you’ll want a minimum of two microphones. Usually, the microphone capturing the higher strings is assigned to the left channel and the microphone capturing the lower strings is assigned to the right channel in the final stereo mix, though the stereo spread generally is not hard left and right. While a single microphone can be used, the lower and upper extremities of the instrument will likely be compromised.

Grand Piano: For the upper strings, position the microphone approximately 8 inches from the piano hammers (to reduce mechanical noise) and 8 - 11 inches above the strings, with the Pan position set to left of center. For the lower strings, position the microphone toward the far end (away from the keyboard) roughly 6 - 12 inches from the end and 8 - 11 inches above the strings, with the Pan position set to right of center. Position the piano’s lid at full stick. (see Fig. 4A)

If you are using a single microphone, position the microphone approximately 8 inches from the piano hammers (to reduce mechanical noise) and 8 - 11 inches above the strings - centered over the piano’s mid point. Pan position should be centered and the piano’s lid should be at full stick.

Upright Piano: With an upright piano, the two microphones are generally placed either just over the top of the piano with the top open, or you can remove the piano’s front panel beneath the keyboard and place the microphones below.

Recording Vocals and Dialog

Ideally, you want to record vocals in a relatively “dead” room. If you clap your hands and get an echo effect, you should consider adding some carpet, blankets, drapes, or other sound-absorbing materials. On that note, make every effort to avoid getting too close to the room’s walls. These hard, reflective surfaces can easily complicate the recording process. Move your mic setup toward the room’s center.

Generally, you should position the vocalist roughly 6 - 8 inches away from the microphone. Getting too close to the microphone tends to increase bass response and can create problems with plosive sounds - those popping Ps, Bs, Ds, and Ts (more on this in a moment). Getting too far away makes the microphone more subject to picking up room ambience - a sound that creates the effect of the vocalist being in a bowl. While vocalists may need to move about in order to hit those high notes, make every effort to maintain a constant distance from the microphone, as this will provide the greatest tonal balance. (see Fig. 1) For the most part, the microphone’s axis (or center line) should aim toward the nose and mouth to obtain the fullest sound. It’s not a bad idea, however, to experiment angling the microphone slightly away from dead center so as to help minimize plosives. Further, you should always place a “pop” filter between the vocalist and the microphone, with the pop filter positioned 3 - 4 inches in front of the microphone. This will greatly increase your ability to achieve the most natural sounding recordings with minimal interference from plosive sounds. Fixing plosives with audio editing software often creates more of a problem than the plosive itself. Use of a pop filter will also protect your microphone’s sensitive capsule - keeping it free from moisture caused by saliva projecting from the performer’s mouth, and breath condensation. Remember… Good microphone technique, proper positioning, and use of a pop filter can make all the difference between a so-so vocal recording and a great one.
Recording Acoustic Guitar

While it may seem obvious, your best results for capturing the acoustic guitar (or any similar stringed instrument for that matter) begin with a properly tuned instrument and strings that, while not old, aren’t so new so as to create tuning issues due to stretching.

There are two optimum points for microphone positioning - either near the bridge or by the twelfth fret. While it may seem natural to place the microphone in front of the instrument’s sound hole, doing so usually increases low frequency response to the point of making the instrument sound “boomy.”

Twelfth Fret Placement: Placing the microphone roughly 2 - 4 inches from the twelfth fret and aimed directly at the strings will generally produce a warm, full bodied sound with good tonal balance. Using this technique, the sound hole’s contribution will be moderated since the microphone is not pointed directly at it.

Bridge Placement: Similarly, you can position the microphone so it is 3 - 6 inches from the guitar’s bridge. This will generally produce a somewhat brighter tonal quality. You should also be prepared to experiment positioning the microphone slightly off-axis should you find yourself capturing too much low frequency response from the guitar’s sound hole.

The acoustical characteristics of your room will also have a pronounced effect on your results. A “live” room will produce an overall “brighter” guitar sound, while a “damped” room will produce more of a mellow tone. If you have two microphones, you may wish to experiment using one in close proximity to the guitar as previously described, with the second microphone on a stand a few feet away to capture the room’s ambience. Blending the two sources can produce excellent results.

Recording an Amplified (Electric) Guitar

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