MIC MOD

USER GUIDE
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Introducing Mic Mod

What is Mic Mod?

Mic Mod makes the mics you own sound like the mics you wish you owned. It instantly expands your mic collection with precise digital models of over 100 classic microphones. Just tell it what mic you’re using and what mic you want it to sound like.

Mic Mod not only reproduces all of the sonic characteristics that make each microphone unique, it also gives you control of each mic’s specific options.

Does the mic have a low cut filter? If so, it’s in the model. Close or far placement? Just dial in the proximity control. Each option results in the same sonic effect that it would have with the actual mic. For that final touch, you can even add some tube saturation.
How does it work?

Audio from a microphone is input to Mic Mod.

The **Source Mic** section of Mic Mod neutralizes the sonic characteristics of the mic that was used to capture the audio.

The **Modeled Mic** section applies the sonic characteristics of the microphone of your choice.

Finally, the audio is passed through a model of a high-quality analog tube preamp, with the option to add some classic **Tube Saturation** distortion.
Quick Start

Follow these steps to get started with Mic Mod.

**Set the Source Mic Parameters**
From the Source Mic menu, choose the mic that you’re actually using to record your audio. If your mic isn’t listed, choose the Generic model that best describes it, or another similar mic.

If your mic has Low Cut or Pattern settings, match the settings in the Source Mic section to settings you’re using on your mic.

If your audio has an audible boost in the bass frequencies from holding the mic close to the sound source, you can increase the Source Proximity setting to neutralize that effect.

**Set the Modeled Mic Parameters**
Choose your desired mic from the Modeled Mic menu. Experiment with the Low Cut, Pattern, and Proximity settings, until you find the sound you’re looking for.

You can even try automating the Proximity setting in your DAW to simulate real-life microphone technique of a vocalist moving closer and farther away from the mic throughout a performance.

**Adjust the Gain and Tube Saturation**
Try warming up your track with a touch of Tube Saturation.

For best results, set the Input Gain so that the input level is near the top of the Level Meter during the louder parts of your track, without clipping.

Then adjust the Tube Saturation control to taste, and reduce the Output Level as needed to avoid clipping.
Controls

Source Mic Controls

The Source Mic section is where you specify the microphone and settings that you're actually using to capture your audio.

The purpose of this section is to remove the effect of the source mic, before applying the sound of the modeled mic.

Source Mic

From the Source Mic menu, select the microphone that you're using.

If you don’t see your mic in the list, choose the Generic model that best describes it, or another similar mic.

Some models will have a second listing with (w) after the mic’s name. This indicates a version of the model with a windscreen attached.

When Bypass is selected from the Source Mic menu, the audio is passed unmodified to the Modeled Mic section. This is a great option for when your audio was recorded without a microphone (e.g. guitar or bass via direct box, direct synth input, etc.).

Source Low-Cut
Some mics have a selectable low cut filter to reduce bass frequencies.

If your mic has a selectable low cut filter, match the **Low Cut** setting in the Source Mic section to the setting on your mic.

*Note: since the purpose of this setting is to neutralize the effect of the source mic, turning on the Source Low Cut filter will actually boost the bass frequencies in the output audio if you’re not actually using your source mic’s built-in low cut filter.*

**Source Pattern**

Some mics allow you to select various pickup patterns (e.g. omni, cardioid, hypercardioid, etc.)

If your mic includes selectable pickup patterns, match the **Pattern** setting in the Source Mic section to the setting on your mic.

*Note: The purpose of this setting is to neutralize the frequency characteristics that result from the mic’s pattern setting. Changing it will affect the frequency response, but not the directionality of the mic’s pickup pattern.*

**Source Proximity**

*Proximity effect* is a boost in bass frequencies that results from placing a directional mic close to a sound source.

If your audio has an audible proximity effect, you can neutralize it by setting the **Proximity** control in the Source Mic section to match the approximate distance between your mic and sound source. Otherwise, you can leave this at the default value, (off).

*Note: Since the purpose of this setting is to neutralize the bass boost that results from a closely placed mic, turning it up will actually cut the bass frequencies. Omnidirectional mics don’t exhibit proximity effect, so the control is disabled when an omni mic pattern is selected.*
Modeled Mic Controls

The **Modeled Mic** section is where you select the mic and settings that you want to apply to your audio.

![Modeled Mic](image)

**Modeled Mic**

From the **Modeled Mic** menu, select the mic that you want to apply to your audio.

Some models will have a second listing with (w) after the mic’s name. This indicates a version of the model with a windscreen attached.

When **Bypass** is selected from the Modeled Mic menu, no mic model is applied. The resulting effect depends on the setting of the Source Mic menu:

- If the correct mic selected in the **Source Mic menu** and **Bypass** is selected in the Modeled Mic menu, the frequency response of the source mic is neutralized.

- If Bypass is selected in both the Source Mic and Modeled Mic menus, the output is identical to the input signal, with the exception of any added tube saturation.
**Modeled Low Cut**

Some mics have a selectable low cut filter to reduce bass frequencies.

If the mic you choose in the Modeled Mic menu includes a selectable low cut filter, choose your desired setting from the Low Cut menu.

The settings are based on precise models of the individual mics, so the available options and sonic results will vary from mic to mic.

**Modeled Pattern**

Some mics allow you to select various pickup patterns (e.g. omni, cardioid, hypercardioid, etc.)

If the mic you choose in the Modeled Mic menu includes selectable pickup patterns, choose your desired setting from the Pattern menu.

The settings are based on precise models of the individual mics, so the available options and sonic results will vary from mic to mic.

*Note: The purpose of this setting is to model the frequency characteristics that result from the mic’s pattern setting. Changing it will affect the frequency response, but not the directionality of the mic’s pickup pattern.*

**Modeled Proximity**

*Proximity effect* is a boost in bass frequencies that results from placing a directional mic close to a sound source.

The Proximity control in the Modeled Mic section can be used to apply this effect to your audio. Try automating it in your DAW to simulate real-life microphone technique.
Closer Proximity settings result in boosted bass frequencies, but the specific effect will vary from mic to mic, to reflect the unique physical properties of each mic.

*Note: Omnidirectional mics don’t exhibit proximity effect, so the control is disabled when an omni mic pattern is selected.*

## Gain and Saturation Controls

### Tube Saturation

The Tube Saturation control models the sound of a classic analog tube preamp. You can use it sparingly to add a touch of warmth to your tracks, or crank it up for a more dramatic tube distortion effect.

The amount of tube saturation applied to your audio is controlled by the Tube Saturation control in combination with the Input Gain control.

For best results, set the Input Gain so that the input level is near the top of the Level Meter during the louder parts of your track, without ever reaching the very top. Then adjust the Tube Saturation control to taste, and reduce the Output Level as needed to avoid clipping.

### Input Gain and Level Meter

The Level Meter displays the level of the audio after processing by both the Source and Modeled Mic models.

The Input Gain control sets the level of the incoming audio. Set it so that the input level is near the top of the Level Meter during the louder parts of your track, without ever reaching the very top.

Some combinations of models and settings can result in increased amplitude, so when changing to a different mic model or adjusting other settings you may need to adjust the Input Gain to avoid clipping.
Output Level

The Output Level control is used to fine-tune Mic Mod’s output level.

Start with a 0dB setting and then reduce as necessary to avoid clipping. This is particularly useful when adding Tube Saturation.
The Mic Models

Below is a listing of all the microphone models available in Mic Mod. Each mic is available from both the Source mic and Modeled mic menus.

**NOTE**: All trademarks are the property of their respective owners. The following manufacturer and model names are used solely to identify the microphones analyzed in the development of our digital models, and do not imply any association with or endorsement by any of the named manufacturers. Mic Mod is not guaranteed to produce audio results consistent with that which could be achieved using the referenced microphones.

**AEA**

**R44C**
Large diaphragm ribbon.
A replica of the classic RCA 44 ribbon mic

**AKG**

**C12A**
Large diaphragm condenser.
A classic multipurpose studio mic, dating from the late ‘60s

**C12VR**
Large diaphragm tube.
A reboot of the classic C12 studio mic.

**C414**
Large diaphragm condenser.

**C414EB**
Large diaphragm condenser.

**C414B/ULS**
Large diaphragm condenser.

**C414B/ULS (mod1)**
Large diaphragm condenser.
Modified by Audio Upgrades.
C414B/ULS (mod2)  
Large diaphragm condenser.  
Modified by Jim Williams.

460B/CK61-ULS  
Small diaphragm condenser.  
A precise, neutral recording mic.

C535 EB  
Small diaphragm condenser.

D112  
Large diaphragm dynamic.  
A classic kick drum and bass guitar mic.

D790  
Large diaphragm dynamic.  
A hand-held vocal mic.

C1000S  
Small diaphragm condenser.  
Often used for field recording.

C 3000  
Large diaphragm condenser.

C 4000 B  
Dual-diaphragm condenser.  
A solid state version of the SolidTube.

The Tube  
Large diaphragm condenser.  
Known for a dark, intimate sound.

SolidTube  
Tube mic.
Perception 120
Large-diaphragm cardioid condenser.

Perception 220
Large-diaphragm cardioid condenser.

Alesis
AM61
Large diaphragm condenser w/ tube circuitry.

Audio-Technica
ATM11
Cardioid condenser.

ATM25
Dynamic.
High-intensity instrument mic.

ATM31
Small diaphragm condenser.

AT813a
Cardioid condenser.

AT853Rx
Electret condenser.

AT2020
Medium-diaphragm cardioid condenser.

AT3525
Large diaphragm condenser.

AT4047/SV
Large diaphragm condenser. Recreates the sound of vintage F.E.T. Condenser mics.
AT4033a/SM
Large diaphragm condenser.

AT4050
Large diaphragm condenser.

AT4051
Small diaphragm condenser.

AT4055
Large Diaphragm condenser.

AT4060
Large diaphragm condenser with tube circuitry.

Audix
D1
Small dynamic.

D4
Dynamic.

OM2
Dynamic
Handheld vocal mic.

OM3-xb
Dynamic.

OM5
Dynamic.

OM6
Small dynamic.

CX111
Large diaphragm condenser.
**SCX1**
Small diaphragm condenser.

**B&K**
4007
Large Diaphragm Prepolarized Condenser

**Behringer**
Ultravoice XM8500
Small dynamic.

**Beyerdynamic**
M-500
Dynamic ribbon.

M-500 Limited Edition Classic (Silver)
Dynamic ribbon.

MC-834
Large diaphragm condenser.
Vocals, piano, strings, brass, voice-overs.

**Blue**
Bluebird
Large-diaphragm cardioid condenser.

Blueberry
Large-diaphragm cardioid condenser.

Mouse
Large-diaphragm cardioid condenser.

**The Bottle w/B6 Capsule**
Vacuum tube condenser with interchangeable capsules.
Brauner
VM1
Large diaphragm tube condenser

Valvet
Large diaphragm tube condenser.
A precise and natural sounding studio mic

CAD
Equitek E100
Condenser.

Equitek E200
Condenser.

Equitek E350
Servo condenser.

C400S
Large diaphragm condenser.

VSM1
Single valve condenser.

95Ni
Dynamic.

Coles
4038
Large diaphragm boundary/ribbon.

Earthworks
Z30x
Enhanced cardioid condenser.

TC30K
Omni condenser.
QTC1
Small condenser.

**Electro-Voice**

**PL20**
Mid Diaphragm dynamic.
Early predecessor to the RE20.

**N/D357**
Mid diaphragm dynamic.
Frequency expressly contoured for female vocals.

**N/D767A**
Dynamic.
Handheld vocal mic.

**N/D868**
Small dynamic mic.
Designed for kick drum.

**RE15**
Small dynamic mic

**RE16**
Small dynamic.
Just like the RE15, but with a blast filter.

**RE55**
Small dynamic.

**Groove Tubes**

**MD-1**
Large diaphragm tube condenser.

**Langevin**

**CR-3A**
Large diaphragm cardioid capacitor.
Lawson
L47MP
Large diaphragm tube condenser.

Manley Labs
Reference Gold
Large diaphragm tube condenser.

Marshall
MXL 2001P
Large diaphragm condenser.

MXL 2003
Large diaphragm condenser.

MicroTech Gefell
Gefell UMT 800
Large diaphragm condenser.

Neumann
U 47
Large diaphragm tube condenser.
A classic vocal mic.

U87
Large diaphragm condenser.

U87 70th Anniversary Gold Edition
Large diaphragm condenser.

U 89i
Large diaphragm condenser.

M 149
Large diaphragm tube condenser.
TLM 103
Large diaphragm condenser.

TLM 193
Large diaphragm condenser.

KM 84
Small diaphragm condenser.

KM 184
Small diaphragm condenser.

Oktava
MC-012
Small diaphragm condenser.

MK-219
Large diaphragm condenser.
Precise and sensitive mic good for vocals and acoustic instruments

MK-319
Large diaphragm condenser.

RCA
BK5A
Uniaxial ribbon.

Rode
NT1
Large diaphragm condenser.

NT2
Large diaphragm condenser.

NTV
Large diaphragm tube condenser.
Royer

R-121
Ribbon.

Sennheiser

MD421
Large Diaphragm Dynamic.

MD441
Large diaphragm dynamic.
Designed to simulate the sound of a condenser mic.

E609
Large diaphragm dynamic.

E835S
Large diaphragm dynamic.

K6-ME64
Cardioid condenser shotgun

Shure

Beta 52
Large diaphragm dynamic.

Beta 57A
Large diaphragm dynamic.

Beta 58
Small dynamic.

Beta 87A
Large Diaphragm Condenser.

Beta 98D/S
Mini Condenser.
SM7A
Dynamic.

SM57
Large diaphragm dynamic.

SM58
Large diaphragm dynamic.

SM81
Large diaphragm condenser.

SM98A
Large diaphragm condenser.

KSM32
Large diaphragm condenser.

VP88
Large diaphragm condenser

Sony
C800G
Large diaphragm tube condenser.

C37P
Tube condenser.

C48
Large diaphragm FET condenser.

Soundelux
U95S
Medium diaphragm tube condenser.
**Tannoy**

*Large Vintage Ribbon*
Large ribbon.

*Small Vintage Ribbon*
Small ribbon.

**Telefunken**

*U-47*
Large Diaphragm Tube Condenser.
A rare vintage U-47 from the days when Telefunken distributed mics for Neumann. Modeled with the original tube.