



MIC MOD

USER GUIDE

Contents

Introducing Mic Mod	4
What is Mic Mod?	4
How does it work?	5
Quick Start	6
Set the Source Mic Parameters	6
Set the Modeled Mic Parameters	6
Adjust the Gain and Tube Saturation	6
Controls	7
Source Mic Controls	7
Source Mic	7
Source Low-Cut	7
Source Pattern	8
Source Proximity	8
Modeled Mic Controls	9
Modeled Mic	9
Modeled Low Cut	10
Modeled Pattern	10
Modeled Proximity	10
Gain and Saturation Controls	11
Tube Saturation	11
Input Gain and Level Meter	11
Output Level	12
The Mic Models	13
AEA	13
AKG	13
Alesis	15
Audio-Technica	15
Audix	16
B&K	17
Behringer	17
Beyerdynamic	17
Blue	17

Brauner	18
CAD	18
Coles	18
Earthworks	18
Electro-Voice	19
Groove Tubes	19
Langevin	19
Lawson	20
Manley Labs	20
Marshall	20
MicroTech Gefell	20
Neumann	20
Oktava	21
RCA	21
Rode	21
Royer	22
Sennheiser	22
Shure	22
Sony	23
Soundelux	23
Tannoy	24
Telefunken	24

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?



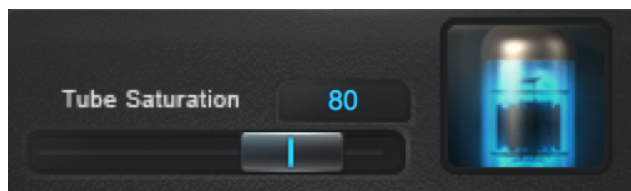
Audio from a microphone is input to Mic Mod.

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

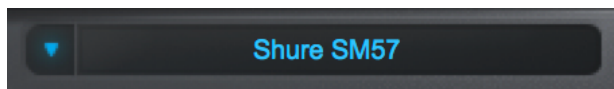
Source Mic Controls



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



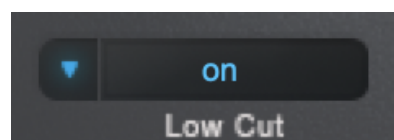
From the **Source Mic** menu, select the microphone that you're using.

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

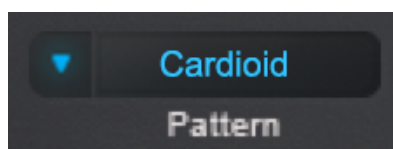


Some mics have a selectable low cut filter to reduce bass frequencies.

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).

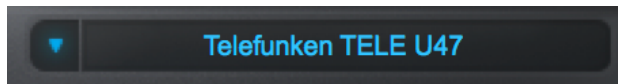
Note: *Since the purpose of this setting is to neutralize the bass boost that results from a closely placed mic, turning it up will actually cut the bass frequencies. Omnidirectional mics don't exhibit proximity effect, so the control is disabled when an omni mic pattern is selected.*

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



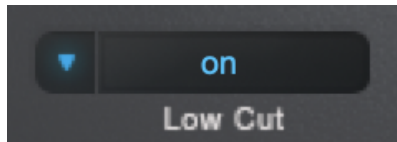
From the **Modeled Mic** menu, select the mic that you want to apply to your audio.

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 is 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

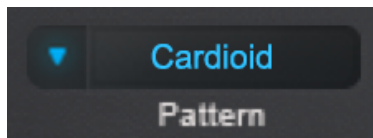


Some mics have a selectable low cut filter to reduce bass frequencies.

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.

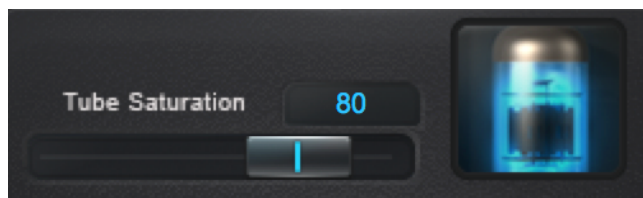
The **Proximity** control in the **Modeled Mic** section can be used to apply this effect to your audio. Try automating it in your DAW to simulate real-life microphone technique.

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.

U 87 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.