



Impulse Response Libraries

MULTI-MIC COLLECTIONS  
412-GTR MES-ST V30-EN-08

Information Manual

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## INTRODUCTION TO MULTI-MIC COLLECTION LIBRARIES

The OwnHammer Multi-Mic Collection libraries provide a massive array of microphone and placement options for the discerning tone connoisseur that wants micro-level control over their guitar sound. The best power amp, DA/AD converter, cables, and microphone preamps for recording electric guitar are in the chain, and microphone selection and placement can cover all manner of source tones, even with just a single cabinet and speaker. The inherent techniques and overall sampling methodology allows for much diversity in this regard, and the readymade mixes give a fantastic starting point for experts and beginners alike.

## ABOUT THIS LIBRARY

### THE CABINET

The 412-GTR MES-ST is based on a Mesa Boogie Standard (commonly referred to as “Oversized”) 4x12 cabinet.

### THE SPEAKER

The V30-EN-08 is based on a 2001 8-ohm Celestion T4335 Vintage 30, made in England.

### THE POWER AMP

This library’s captures were driven by a mostly neutral tube power amplifier. While the overall frequency response is largely even like that of a solid state reference amplifier, the common tube amp deviation traits are present that both liven and thicken up the sound slightly. As such they are ideal as-is with accurate modeling platforms and tube amps sent to dummy load + line out devices. For platforms that need the little extra scoop of modestly configured guitar tube amp driven files, this is quickly and easily accomplished by implementing the following simple post processing adjustment:

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### SOUNDING LIKE A GUITAR TUBE AMP

With the files contained in this library there is a very quick, simple step that can be taken to duplicate the sound of a guitar tube power amp with the Presence and Depth set to 0, similar what is offered in other OwnHammer speaker cabinet impulse response libraries.

To replicate this sound, following the cabinet IR loader add an EQ with a parametric bell curve set to -3 dB at 400 Hz. Adjust the Q/bandwidth to roughly where the edges of the curve start to make the initial cut around 100 Hz on the low side and 2 kHz on the high side. If necessary, adjust the Q/bandwidth to taste from here to best suit your sound source and tonal preference.

### THE MICS AND MIC MIXES

In this library, the speaker cabinet was sampled with many microphones and capture types. For microphones with position numbers 00 through 10, these positions represent movement across the face of the speaker from brighter and closer to center (00) to darker and further out on the cap or cone (10). These numbers do not represent any specific unit of measure and are just sequential arbitrary definitions.

Below are explanations of the mic models and pre-made mix types:

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## 2011C

Based on a DPA 2011C condenser microphone.

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## AE2500

Based on an Audio Technica AE2500 dual element dynamic and condenser microphone.

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## ARTIST MIXES

Mix-BN is based on a multi-mic configuration created by Brian Nowak.

Mix-EWH is based on a multi-mic configuration created by Eric Hill at [The Blue Room Recording Studio](#).

Mix-JY is based on a multi-mic configuration created by Paramore touring guitarist Justin York.

Mix-KK is based on a multi-mic configuration used by songwriter, engineer, and producer [Kato Khandwala](#).

Mix-OH1/2 are based on multi-mic configurations used by OwnHammer owner and operator Kevin Rowe.

Mix-SP1/2 are based on multi-mic configurations created by [Scott Peterson](#).

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## AUXILIARY

FF-KM is based on far field captures taken with a vintage Neumann KM84 condenser microphone.

FF-TC is based on far field captures taken with an Earthworks TC30 condenser microphone.

The far field captures were taken in a silent reflection free outdoor environment.

Captures go from directly on axis (1) to progressively further off axis (5).

Floor is based on a floor plane placed AEA R92 ribbon microphone.

MF is based on a mid field placed AEA R92 ribbon microphone.

Rear is based on a vintage Neumann KM84 condenser microphone.

Room is based on a vintage Neumann KM84 condenser microphone.

Sub is based on a Yamaha SubKick dynamic microphone.

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## C414

Based on an AKG C414 B-ULS condenser microphone.

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## E906

Based on a Sennheiser e906 dynamic microphone.

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## FATHEAD

Based on a Cascade FatHead II ribbon microphone.

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I5

Based on an Audix i5 dynamic microphone.

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KM84

Based on a vintage Neumann KM84 condenser microphone.

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M88

Based on a Beyerdynamic M88 dynamic microphone.

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M160

Based on a Beyerdynamic M160 ribbon microphone.

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MA200

Based on a Mojave Audio MA200 condenser microphone.

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MD421M

Based on a modern production Sennheiser MD421 Mk-II dynamic microphone.

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MD421V

Based on a vintage Telefunken MD421-5 dynamic microphone.

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MD441

Based on a vintage Sennheiser MD441 dynamic microphone.

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MIX-HG

A multi-mic combination most ideally suited for high gain guitars, pickups, amps, and tones.

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MIX-LG

A multi-mic combination most ideally suited for low gain guitars, pickups, amps, and tones.

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MIX-MG

A multi-mic combination most ideally suited for mid gain guitars, pickups, amps, and tones.

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PR20

Based on a Heil PR20 dynamic microphone.

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**PR30**

Based on a Heil PR30 dynamic microphone.

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**R92**

Based on an AEA R92 ribbon microphone.

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**R121**

Based on a Royer R121 ribbon microphone.

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**SM15**

Based on a modern production Shure SM57 dynamic microphone angled at 15 degrees off-axis, pointed inward.

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**SM30**

Based on a modern production Shure SM57 dynamic microphone angled at 30 degrees off axis, pointed inward.

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**SM45**

Based on a modern production Shure SM57 dynamic microphone angled at 45 degrees off axis, starting at the speaker center and pointed outward toward the cone (ala the popular "Studio Fredman 45" technique).

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**SM57M**

Based on a modern production Shure SM57 dynamic microphone.

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**SM57V**

Based on a vintage Shure Bros Unidyne-III SM57 dynamic microphone.

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**SM7B**

Based on a Shure SM7B dynamic microphone.

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**TC30**

Based on an Earthworks TC30 condenser microphone.

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**U70**

Based on a Microtech Gefell UMT70S condenser microphone.

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**VP88**

Based on the mid element of a Shure VP88 condenser microphone.

## WAVE AUDIO FORMAT FILES

The Wav folder contains files in .wav format for use in any convolution reverb loader, be it DAW hosts or external hardware devices. These files are formatted in 44.1 kHz, 48 kHz, 88.2 kHz, and 96 kHz sample rates in mono and stereo (dual mono) channel options for greater compatibility potential.

For information concerning loading of these files into the host of your choice beyond what is included in this user manual and additional text files in the directory structure, please refer to their website or documentation.

## FILE DECAY TAIL AND MINIMUM PHASE TRANSFORMATION

This library contains various configurations of decay (reverb) tail truncation level and minimum phase transformation. These elements can change the sound as well as the compatibility with various platforms or ease of use when mixing IR files.

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### WAV-200MS

Files in the Wav-200ms folder have had the decay tail truncated to 200 milliseconds. This shorter truncation level may assist in loading platforms that are bound by sample length ceilings. If you use the full 500 millisecond files and your IR loader throws an error stating that you are attempting to use files that exceed the sample length (note, not the sample rate) limitations, use these files. In addition to this scenario, and the 200 millisecond files could potentially help with CPU usage on less powerful systems or where track and instance counts are high.

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### WAV-500MS

Files in the Wav-500ms folder exhibit the full, uninhibited decay tail. These files will contain all of the reflective information of sound moving around inside the cabinet, and inside the room. In some instances, minimum phase transformed files in this folder may be slightly more quiet in volume level than those in the 200ms directory, however this is just a side effect of the involved math, and is not a quality factor, just output level. This phenomenon is dependent upon the data inside each unique IR, and is not consistent.

## ADDITIONAL PLATFORMS

For additional convenience files with the appropriate sample rate, channel count, and time alignment standard are included for popular external hardware systems. These files are no different from those in the Wav directory structure, save for changing the naming convention to better accommodate front panel displays with limited character lengths. In these cases and in these subdirectories, additional text files are included for extended information.