



Impulse Response Libraries

V3 VECTORS

412-GTR MES-ST V30-EN-08 R121R2

Impulse response files created for and compatible with:

Fractal Audio Axe-Fx and Axe-FX II

Kemper Profiling Amplifier

Convolution Reverb Hosts

Information Manual

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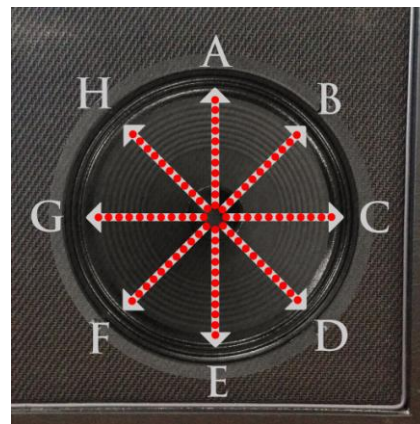
## INTRODUCTION TO V3 VECTOR LIBRARIES

The OwnHammer V3 Vector libraries give the choice of tone back to the user by providing tools to make the sounds that YOU want, not what was chosen for you. How is this achieved? A “kitchen sink” approach, of course! By sampling across the entire face of a speaker, all of the tonal possibilities are unlocked. The best power amps, converters, cables, and mic preamps for recording electric guitar are in the chain, and the rest is now at your fingertips.

## HOW THE VECTORS WORK

In the Vector libraries the mic is extensively placed across the face of the speaker along nine separate directional vectors. Vectors A through H are swept from at or near the center of the speaker outward across the face in incremental steps along the X and/or Y axis planes, each vector 45 degrees apart from its neighbor. A ninth vector, vector I (not depicted in the graphic to the right), starts at the center of the speaker at the grill cloth and is then pulled directly backward in incremental steps away from the cabinet along the Z axis plane.

Since this is a large amount of files to parse through on first use, a "Quick Start" folder has also been included which copies over a few captures from each power amp that represent the most common placements for this type of microphone.



## 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 2012 Celestion T4335B Vintage 30, made in England to Mesa specifications.

### THE POWER AMPS

Multiple power amps were used to drive the speaker cabinet and are listed below.

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SS

A ruler flat, uncolored, reference level solid state amp.

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T0

A mostly flat, neutral tube amp.

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T1

A tube guitar amp with a natural response (no added presence/depth boost).

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## T2

A tube guitar amp with a slightly larger sound than T1.

## THE MIC

The R121r2 is based on a Royer R121 ribbon microphone, the rear of the element facing the speaker, placed a depth of 2 inches from the grill cloth for vectors A through H. Vector I captures will be the same for all R121f derivatives.

## THE MIC POSITIONS

For vectors A through H, the mic starts out at the center of the speaker at position 00 (brightest) and incrementally works its way across the face of the speaker toward near the edge of the cone at position 10 (darkest).

For vector I, the mic starts at the center of the speaker at the grill cloth at position 00 (closest) and incrementally is pulled away from the cabinet in the Z axis only toward position 10 (farthest away).

## FRACTAL AUDIO FORMAT FILES

To accommodate multiple devices there are variations of the Fractal Audio Systems associated platform files, all subdivided in the following folders contained within the library directory structure:

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### AXE-FX

The Axe-Fx folder contains files in .syx format for use with the Fractal Audio Axe-Fx Standard and Axe-Fx Ultra. All files are minimum phase transformed thus time and phase coherent with all stock IR's.

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### AXE-FX-II \ HI-RES-II

The ..\Axe-Fx-II\Hi-Res-II folder contains files in .syx format for use with the Fractal Audio Axe-Fx II (Original & Mark II). All files are minimum phase transformed thus time and phase coherent with all stock IR's.

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### AXE-FX-II \ HI-RES-XL

The ..\Axe-Fx-II\Hi-Res-XL folder contains files in .syx format for use with the Fractal Audio Axe-Fx II XL. All files are minimum phase transformed thus time and phase coherent with all stock IR's.

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### AXE-FX-II\ULTRA-RES

The ..\Axe-Fx-II\Ultra-Res folder contains .wav files perfectly prepared for conversion to the Fractal Audio Systems Ultra-Res format. These files are not pre-converted as the result of license agreement restrictions.

The .wav files as-is in this sub-directory tree are:

- 200 ms in length.
- Equal to or less than 32 characters in file name length so that once converted no necessary information will be truncated from the internal display name of the resultant .syx files.
- \*NOT\* minimum phase transformed. Conversion to Ultra-Res via Cab-Lab will perform this function, so providing

them with the raw time of flight will prevent cascading minimum phase transform algorithms, minimizing the deviation in sonics from the true impulse response. As such, you should not use these .wav files in any external mixing application, and in those cases use the files from the Wave-Audio.zip which have been minimum phase transformed.

Conversion to Ultra-Res requires Fractal Audio System's Cab-Lab application, and can be purchased from the Fractal Audio Systems Web Store at <http://shop.fractalaudio.com>.

To load IR's into the Axe-Fx, please see Fractal Bot at <http://www.fractalaudio.com/fractal-bot.php>.

To mix IR files with one another, please see Cab Lab at <http://shop.fractalaudio.com>.

For additional information concerning the loading or use of these files in FAS devices, and use of FAS software please refer to the documentation and forum at <http://www.fractalaudio.com>.

## KEMPER PROFILING AMP FORMAT FILES

The Kemper folder contains files in .kipr format for use with the Kemper Profiling Amp. These files were created using Kemper's Cab Maker application to convert the minimum phase aligned 44.1 kHz Mono .wav files.

For information concerning loading of these files into KPA devices, please refer to the documentation and forum at <http://kemper-amps.com>.

## 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.

In addition to the full 500 millisecond files are shorter 200 millisecond files located in the ..\Wav\Truncated directory. These will be useful for IR loaders that impose a sample length limit, and potentially help with CPU usage on less powerful systems or where track and instance counts are high.

For information concerning loading of these files into the host of your choice, please refer to their website or documentation.

## ADDITIONAL INFORMATION

The V3 Vector libraries are verbose, covering a lot of gear, and the sheer amount of content may be daunting to those with minimal experience with mic'ing guitar cabinets. Not to fret, here are some proprietary resources to help along the way.

For more information and images regarding the cabs, speakers, and mics, please visit:

<http://www.ownhammer.com/gear>

For more information on common mic mixes like those used in other OwnHammer IR libraries, and information on how to create single IR files derived from multiple individual files, please visit:

<http://www.ownhammer.com/tips>