

MOABI CUSTOM



IMPULSE RESPONSE & PRESET LIBRARY

Feature Information & Reference Guide

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CABINET

As opposed to the traditional plywood or particle board used for most guitar and bass speaker cabinets, this library centers around a one-off, custom built 4x12 made from dense, heavy, solid African moabi hardwood with no tolex/covering and a VERY light lacquer coating. This change from utilitarian and basic construction grade materials to exotic and solid furniture grade/tone-wood materials takes what is traditionally a piece of road-ready live sound reinforcement equipment and treats it more like an acoustic instrument. When compared directly using the exact same speaker setup mic'd in the exact same place, this moabi cabinet's solid hardwood composition is readily heard in the form of a more lively, woody, tight, and resonant response compared to a plywood speaker cabinet (covered in glue and tolex) of nearly identical dimensions.

SPEAKERS

Numerous speaker types and era of manufacture ranges were used for this library. Traditionally, IR libraries seek to replicate or simulate specific gear configurations on an individual basis. The OwnHammer Moabi Custom library deviates from this approach and instead focuses on a results driven sound design goal, where the sum is the focus rather than the parts. Numerous Celestion® T1221, T3903, T3904, T4335, and T5901 speakers spanning the 1970's through the 2010's were captured and blended together in various ways to achieve the end results found within.

CONFIGURATION BASED VOICINGS

The deviation from traditional off-the-shelf cabinet inclusion and speaker presentation aren't the only unique underlying features found within this IR library. In order to achieve the results provided, changes in the amount of active speakers at a given time (two, four, or a mix-in-post) as well as varied and result specific microphone positioning techniques were added to the equation. Further changes in response for various components were accomplished through the mic'ing of either the bottom 'straight' section of the cabinet or the top 'slant' section, as well as open and closed back rear baffle deviations.

When combining all elements – type of speaker, amount of active speakers, and mic technique – numerous configuration based voicings are accomplished and provided in one of two essential sound design goal styles:

Core Voicings

This section of the library uses the same speaker types and speaker blend levels throughout, and between each only the amount of active speakers and mic technique changes. This allows for a consistent base tone that can be altered to accommodate changes in guitar, pickup, amp type, or gain structure all while retaining a primary theme. Representing the main creative focus of the Moabi Custom library, these are:

Extra Large

A thick and chunky sound without becoming veiled and murky. Great for a more rootsy tone, and/or for more traditional forms of progressive rock and metal.

Large

A very familiar sound and configuration for all things rock, from classic to modern, and possibly some metal.

Medium

A more direct and focused sound while still retaining some body and fullness. Excellent for similar applications as the Large cabinet voicing, as well as leads, cleans, and British flavored blues and breakup tones.

Small

Largely the black sheep of the entire library, this compact tone would be most familiar to those who use and/or prefer small combo amp sounds. The overall character here is much more suited to amp circuits designed to be used in conjunction with open back 1x12 or 2x12 enclosures, single coil pickups, and less aggressive music styles.

Specialty Voicings

Contrary to the core voicings, specialty voicing subgroups all deviate in their approach on an individual basis, with a singular and unique goal in mind. There are no consistencies between them, or to the core voicing group.

Balanced

Even, smooth, and unoffending in any area of the frequency response. Excellent for tones that will be more pleasant while practicing/playing unaccompanied, or that will sit a little further back in a mix. Larger in size while still tight on both ends, primarily aimed at medium to high gain amp types, pickups, and play styles.

Cali Style

Thick and roaring in the low mids, and smooth yet slightly present in the high end. Great for that 'CALI'/'RECT' type of tone from the 70 watt era of speakers made for this Petaluma based company. Geared towards heavier gain amp types and play styles, and may benefit from amps with lots of high mid cut to complement the response.

Contemporary

Modern, cutting, but versatile. Certainly aimed at the high gain group, and in situations where cutting through a dense mix while still having a moldable tone is desired.

Down Tuned

Suited to very heavily down tuned guitars – primarily A and below – and the subsequent music styles that typically coincide with such. This voicing is very specific in tonality, and primarily intended for those to which the terms 'djent' and 'thall' are a part of your common language and musical familiarity, if not wheelhouse.

Drogonian

This fire breathing monster of a combination will light ablaze anything you set before it. The greatest amount of sharp attack and bite will be found in this voicing for this particular library.

At the end of the day, the voicing descriptions are merely suggestions. Your mileage may vary, so experiment!

DISTANCE MICS

Located in the "Auxiliary" folder, the following distance mic captures are provided:

- | | |
|-----------|---|
| Aux-Mix 1 | • Custom blend of 2x12 Floor, Mid, Rear, and Room captures. |
| Aux-Mix 2 | • Custom blend of 4x12 Floor, Mid, Rear, and Room captures. |
| Floor 1 | • Floor plane 2x12 capture using a vintage Neumann® KM84 condenser microphone. |
| Floor 2 | • Floor plane 4x12 capture using a vintage Neumann® KM84 condenser microphone. |
| Mid 1 | • Mid field 2x12 capture using an AEA® R92 ribbon microphone. |
| Mid 2 | • Mid field 4x12 capture using an AEA® R92 ribbon microphone. |
| Rear 1 | • Back of 2x12 capture using a vintage Neumann® KM84 condenser microphone. |
| Rear 2 | • Back of 4x12 capture using a vintage Neumann® KM84 condenser microphone. |
| Room 1 | • Ambient 2x12 room capture using a vintage Neumann® KM84 condenser microphone. |
| Room 2 | • Ambient 4x12 room capture using a vintage Neumann® KM84 condenser microphone. |

CLOSE MICS

In this library, singular sweet spot captures from the following microphones are provided for all cabinet voicings:

- | | |
|------|---|
| 7B | • Based on a Shure® SM7B dynamic microphone. |
| 57M | • Based on a modern production Shure® SM57 dynamic microphone. |
| 57V | • Based on a vintage Shure® Unidyne III SM57 dynamic microphone. |
| 58 | • Based on a Shure® SM58 dynamic microphone. |
| 87 | • Based on a vintage Neumann® U87 condenser microphone. |
| 88 | • Based on a Beyerdynamic® M88 TG dynamic microphone. |
| 121 | • Based on a Royer® R121 ribbon microphone. |
| 160 | • Based on a Beyerdynamic® M160 ribbon microphone. |
| 201 | • Based on a Beyerdynamic® M201 TG dynamic microphone. |
| 414 | • Based on a vintage AKG® C 414B-ULS condenser microphone. |
| 421M | • Based on a modern production Sennheiser® MD421 mk-II dynamic microphone. |
| 421V | • Based on a vintage Telefunken/Sennheiser® MD421/5 dynamic microphone. |
| 421X | • Based on an out-of-the-box-summed mixture of the “421M” and “421X” microphones. |
| 441 | • Based on a vintage Sennheiser® MD441 dynamic microphone. |
| 906 | • Based on a Sennheiser® e906 dynamic microphone. |

CORE MIXES

Along with the single mics in the main configuration based voicing folders are the core mic mix IR's. To accomplish their differing and use case intended sounds, these vary from mix to mix in microphones used, their placement(s), and/or their mix levels, of which are consistent among all configuration based voicings.

A1

In creating this library, this mic mix most suited the intended overall sound design goal: modern, tight, clear, even, well bodied, defined, and somewhat forward sounding without being thin or harsh. A very “in the pocket” tone.

Buzz Saw

For those who want to ‘Rip & Tear’, this one can get a little nasty. Somewhat jagged up top, without any nasal or pinched upper mids to accommodate the EQ filter pedal boosted square wave type amps that would accompany it.

Cutting

A sort of half way point between Buzz Saw and Extreme, leaning more towards the upper mid focus of the latter.

Extreme

Intended for very high gain music styles where cutting through lots of noise and dense arrangements is needed, while still retaining an overall balanced response (as compared to, say, the Buzz Saw mix).

Heavy

A sound that is thick without being boomy, and great for achieving a modern tone of the more muscular variety.

High Gain

An extremely common, tried and true, go-to configuration for higher gain tones through medium to high output humbuckers. Excellent for modern and hard rock styles, with a thick but pleasant sound that sits evenly in a mix.

Live Sound

A one-size-fits-all workhorse tone for live sound applications. Equally suited to any pickup configuration and music style, with a full body for high sound pressure level environments with enough bite on top to still cut through.

Low Gain

Provides the fattest and fullest bottom end and lower midrange of all the core mixes. This is most recommended to be paired with lower gain tones through single coil pickups.

Mid Gain

Exudes a very balanced top and bottom with a slightly pushed midrange. Best suited for middle-of-the-road tones through low output/PAF-type humbuckers or P90's.

Solo Lead

Thick and pillowy in presentation, but still with high amounts of focus for individual note clarity. Most recommended for single note solo/lead playing through any pickup configuration or music style.

In similar fashion to the configuration based voicings, mic mix names are merely general suggestions. Experimentation is recommended, as results will inevitably vary with taste and equipment pairing.

MIC PAIR MIXES

Some may consider this a 'rabbit hole', while others may consider it an invaluable turn-key-option portal to customization, individualization, and diversification from the core tonality of the single mics and core mixes.

Both descriptions can be equally valid.

The design intention for the primary features of the Moabi Custom library – accomplished as aforementioned through the choice of speakers, mic placements, and core mic mix options – was to provide a balanced but modern sounding file set. That isn't necessarily what everyone wants, nor is it all that is available to be had out-of-the-box thanks to the Mic Pair Mixes contents for each configuration based voicing.

If a certain microphone really hits the spot, variations on that sound can be explored through this section. Changing the core file presentation from a more modern sound to a more vintage sound is also possible. For example, the 87 and 160 mics both have a smooth, gooeey, classic tone to them while still retaining an overall balanced sound. Exploring the files in the '87+' and '160+' Mic Pair Mix folders may well satisfy the need for that more laid back flavor while still maintaining the lively, woody, organic, and tight sound the overall library provides.

For this area, the first mic of the pair in the file name, and the subfolder that it is found in, is slightly dominant in the mixture. For example, the 87 mic is mixed louder than the 160 mic in a Mic Pair Mix IR file that says "87+160".

BASIC AMP PRESETS

There are three .syx files within this library that are not cabinet impulse responses, but basic and simple amp presets. These presets, found in the "Presets" folder, were created on the Axe-Fx III, firmware version 20.00. Additional information and tweaking tips regarding these presets can be found in the "Presets\PDF Info" folder.

The following IR files are intended for the presets, are copy/pasted into the "Presets\Recommended IRs" folder, and should first be loaded into your device's IR storage repository:

Preset		Recommended IR
OwnHammer BE Rhythm	< >	OH Moabi MED Mid Gain
OwnHammer HBE Rhythm	< >	OH Moabi CNT A1
OwnHammer HBE Modern	< >	OH Moabi CNT Heavy

If the preset will not load into your Fractal Audio Systems hardware device or function properly as a result of any variance in core system or firmware revision from that in which these presets were created, a PDF of the same name can be reviewed to build the patch from scratch in the aforementioned location (“Presets\PDF Info”).

LOADING THE FILES

Impulse response files are in “Ultra Res” .syx file format, and can be uploaded via editor interface into any compatible Fractal Audio Systems hardware modeler. At the time of this document’s creation, that includes the AX8, Axe-Fx II, Axe-Fx III, FM3, and FM9.

This library does not and will not include .wav or .ir files, and cannot be used with Cab Lab software.

For further information on the file import process, see official Fractal Audio Systems documentation for your product, or the information and media found at the following locations where applicably relevant:

ownhammer.com/tutorials/fractal

AUTHORSHIP

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