

OR-4X12

pro IR series

SPEAKER CABINET
IR LIBRARY



cabIR.eu
fine impulse responses

based on a '71 Orange™ 4x12" guitar cabinet, loaded with Celestion™ G12H30 „pulsonic cone" speaker from 1971

A warmly very "special thank you" to Siegbert "Sigi" Merker of www.marshall-forever.de.

Without him we wouldn't have been able to realize this IR-Collection.



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Manufacturer and product names mentioned herein are trademarks or registered trademarks of their respective owners, which are in no way associated or affiliated with cab-IR.eu, Markus Hohmann. The names are used only to indicate sonic and performance characteristics.

THE CABINET

...some specs about the cab

Maybe it was „irony of fate“, that we found this extraordinary Orange™ cab in a hidden corner at the German Marshall-Museum (www.marshall-forever.de).

This cab isn't just impressive because of its heavy weight and massive construction. It's just all about its fantastic sound. Nowadays the current cabs from Orange™ are usually loaded with Vintage 30 or the G12-K100 speakers.

However, this big lady - built in 1971 - got loaded with the legendary G12H30 speakers with „pulsonic cone“ (so-called „Pre-Rola's“). In combination with its heavy and oversized cabinet, this baby shines with a very balanced sound, which is suitable for all kinds of musical style from **Rock** to **Metal**. It is also a great choice for **Blues**, **Country** or even **Jazz**.

Cab

Manufacturer	Orange™
Model	-
Construction	4x12" straight box, closed design, oversized
Time of production	-
Year of manufacture	1971
Power rating / Watt	120W
Resonance frequency in Hz	108 Hz
Comment	very heavy and massive cab

Speaker

Manufacturer	Celestion™
Model	G12H30™ (Greenbacks)
Year of manufacture	1971
Power rating / Watt	30W
Comment	Pulsonic Cone, Greenbacks

STRUCTURE

_add-on_SIGNATURE-Mixes

Signature Mixes (_SIG_) from Anand Mahangoe (_AM) and Thibault de Robillard (_TR).

_OVERVIEW

Quickstart with whole Multi-Mic IRs (_MULTI_) of a single speaker A, B, C and D or of all cabinet-speaker (_CAB_) in three different virtual Power-Amp-Voicings (_I / _P / _T).

***HINT:** This folder is intended for experiencing the sonic difference and the effects of the virtual Power-Amp Voicings.*

- └─ _add-on_SIGNATURE-Mixes
- └─ _OVERVIEW
- └─ I_dealized-Null-Amp
 - └─ MIX-Ambient
 - └─ MIX-Cabinet
 - └─ MIX-Speaker-A
 - └─ MIX-Speaker-B
 - └─ MIX-Speaker-C
 - └─ MIX-Speaker-D
 - └─ SINGLE-MICS_MPT_minimal-phase
 - └─ SINGLE-MICS_RAW_real-phase
- └─ P_push-Resonance-Amp
 - └─ MIX-Ambient
 - └─ MIX-Cabinet
 - └─ MIX-Speaker-A
 - └─ MIX-Speaker-B
 - └─ MIX-Speaker-C
 - └─ MIX-Speaker-D
 - └─ SINGLE-MICS_MPT_minimal-phase
 - └─ SINGLE-MICS_RAW_real-phase
- └─ T_tube-Amp
 - └─ MIX-Ambient
 - └─ MIX-Cabinet
 - └─ MIX-Speaker-A
 - └─ MIX-Speaker-B
 - └─ MIX-Speaker-C
 - └─ MIX-Speaker-D
 - └─ SINGLE-MICS_MPT_minimal-phase
 - └─ SINGLE-MICS_RAW_real-phase

Idealized-Voicing

Description: Cab IR's without any influence of a tube power amp.

Sound: 100 % neutral, no bass or high boost.

Perfect for: Digital modeling devices with the ability to simulate the behavior of real tube power amps or real tube power amps.

Details: Equal to a power amp with idealized properties like most solid-state power amps, without any feedback interaction caused by the power amp. The entire power-amp sound has to be shaped by the digital modeling device or a real tube power amp.

Filename symbol: _I

Name of folder: I_idealized-Null-Amp

Push-Voicing

Description: Guitar cab with the „Push“ of a tube power amp.

Sound: Pronounced bass boost, no high boost.

Perfect for: Digital modeling devices without proper tube power amp simulation, or solid state power amps, if tube amp sound is wanted.

Details: This voicing simulates the „Push“ of a tube power amp - but without the typical high boost caused by the impedance behavior of the speakers. In the high frequency range this voicing is 100 % neutral, the boost only occurs in the bass range.

Filename symbol: _P

Name of folder: P_ush-Resonance-Amp

Hint: Virtual Resonance-Control

Mixing the _I-Voicing and the _P-Voicing, enables you to regulate the amount of „Thump“ in the low frequency bottom end by taste - just like the resonance controls of a tube power amp.

Tube-Voicing

Description: Guitar cab with the entire boost of a tube power amp.

Sound: Bass boost and high boost.

Perfect for: Digital modeling devices without proper tube power amp simulation or solid state power amps, if tube amp sound is wanted.

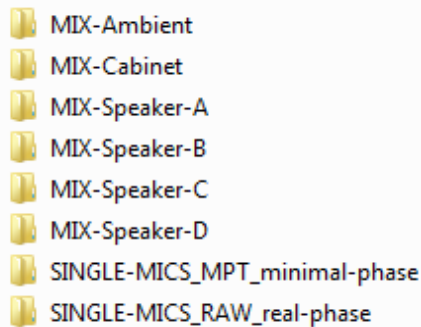
Details: The IR's were produced by using a high quality tube power amp. This is where the „Push“ comes from - the accentuation of the cab's resonance frequency at 108 Hz. Additionally, there happens a presence boost in the higher frequency range, caused by the interaction with the tube power amp, which results to a more „direct“ sound.

Filename symbol: _T

Name of folder: T_ube-Amp

Hint: Virtual Tube Power Amp Coloration

Mixing the _I-Voicing and the _T-Voicing enables you to regulate the tube power amp coloration by taste.



MIX-Ambient

AMBIENT-Mixes: Two mono-IR's, declared as LEFT (**_L_**) and RIGHT (**_R_**) submit to a stereo-couple. The room (**_room_**) and „back-cab“ (**_rear_**) mic positions are mixed to the MULTI-IR's, so, as a result, these IR's demonstrate a very „3D-like“ sound of the cabinets in the real room, when mixing the room- and rear-mic from the SINGLE-MIC_RAW Folder together.

HINT: Spatial perception originates first of all through the so-called time-of-arrival difference. The room- and rear-IR's contain this information, and can help to create useable „room simulations“.

NOTE: The authentic room- and reverb tail of the 500ms IR's will only be useful, if the IR's get loaded into a convolution host with the ability to handle the full length of the IR's. Existing hardware solutions will cut the IR's and their reverb tail.

SINGLE-MICS_MPT_minimal-phase

64 „close-mic“ IR's, 3 room-position IR's (**_room_**) and 1 „back-cab“-position IR (**_rear_**) are contained in this folder. The IR's of the MPT-Folder are „minimal phase transformed“. They are phase neutral and contain no time-of-arrival difference or „pre-delay-offset“

NOTE: These MPT-IR's are very useful to prevent phase issues when mixing IR's. MPT-IR's are „phase-aligned“ and great for direct and transparent „in your face“ mixing results.

SINGLE-MICS_RAW_real-phase

64 „close-mic“ IR's, 3 room-position IR's (**_room_**) and 1 „back-cab“-position IR (**_rear_**) are contained in this folder. The IR's in the RAW-folder contain the authentic „pre-delay“ from the speaker to the microphone. They don't behave phase neutral and as a result, comb filter effects can occur when mixing these IR's.

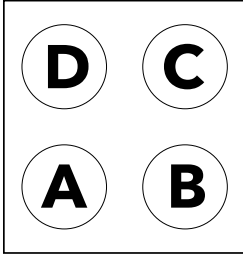
NOTE: These RAW-IR's are very useful for mixing, if phase issues are supposed to occur. Phase issues and comb filter effects can „soften“ the „top-end“. As a result these Mix-IR's sound less harsh, and can have more character. Contrary to the MPT-IR's they sound less direct and „in your face“.

DECLARATION



ORANGE

IR-Names: Declaration

<u>_SIG_</u>	Signature-Mix by Anand Mahangoe (<u>_AM</u>) and Thibault de Robillard (<u>_TR</u>)
<u>_MULTI_</u>	Mix of miscellaneous microphone types and -positions.
<u>_CAB_</u>	Cabinet-Mix (all speakers)
<u>_A_ _B_ _C_ _D_</u>	Close-Mic. or speaker-mix of the mentioned speakers
	Speaker-Position
<u>_AMBIENT_(spk.)_L_</u> <u>_AMBIENT_(spk.)_R_</u>	AMBIENT-Mixes are stereo couples: the two Mono-IR's, LEFT (L) and RIGHT (R) amount to a stereo couple. Mixes contain MULTI-Mic., <u>_room_</u> and <u>_rear_</u> positions.
<u>_M(No.)_</u>	MPT-IR or MPT-Mix-IR
<u>_R(No.)_</u>	RAW-IR or RAW-Mix-IR
<u>_room_</u>	Room position
<u>_rear_</u>	„back-cabinet“ position

Mikrophone names: Declaration (from top to bottom)

414	based on AKG™ C414	condenser
451	based on AKG™ C451	condenser
E8K	based on Behringer™ ECM8000	condenser
441	based on Sennheiser™ MD441	dynamic
SM7	based on Shure™ SM7B	dynamic
57	based on Shure™ SM57	dynamic
906	based on Sennheiser™ e906	dynamic
421	based on Sennheiser™ MD421	dynamic
X1R	based on sE Electronics™ X1R	ribbon



OVERVIEW

Available formats

500 ms 44.1 kHz-16 bit wav	170 ms 44.1kHz-16bit wav
500 ms 44.1 kHz-24 bit wav	170 ms 44.1kHz-24bit wav
500 ms 48 kHz-16 bit wav	170 ms 48kHz-16bit wav
500 ms 48 kHz-24 bit wav	170 ms 48kHz-24bit wav
500 ms 96 kHz-24 bit wav	170 ms 96kHz-24bit wav

Overview and quantity

_add-on_SIGNATURE-Mixes	5
_OVERVIEW	15

	I_dealized-Null-Amp	P_ush-Resonance-Amp	T_ube-Amp
MIX-Ambient	10	10	10
MIX-Cabinet	15	15	15
MIX-Speaker-A	30	30	30
MIX-Speaker-B	30	30	30
MIX-Speaker-C	30	30	30
MIX-Speaker-D	30	30	30
SINGLE-MICS_MPT_minimal_phase	68	68	68
SINGLE-MICS_RAW_real_phase	68	68	68

TOTAL-IRs

863

UNIQUE-IRs

644

OUR „OBJECTIVE
SWEET SPOT METHOD“
GUARANTIES MAXIMUM
SOUND-EFFICIENCY
FOR ANY EXISTING
PERIPHERY



ABOUT CABIR.EU

cabIR.eu emerged as a result of our dissatisfaction about the obtainable speaker cabinet impulse response libraries on the market up to now.

We got to know each other on a guitar player convention, where we began to produce our own genuine impulse responses. This IR-library is the result of teamwork, friendship, a lot of know-how, innovation and creativity.

We always wanted to go further than others. And so, we are really proud to give you this genuine IR's as an inspiring sound tool.

We are confident, that you will love them!

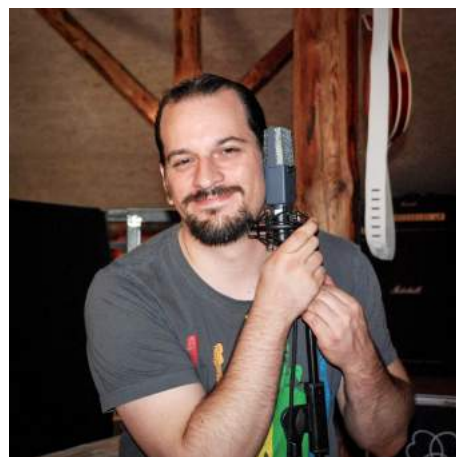
THE TEAM

Countless hours of collective hard work have molded a trusted community and close friendship:



Markus Hohmann

Founder and CEO of cabIR.eu. Guitarist, audio advisor, IR-explorer, sound enthusiast and founder of the german axefx.de forum. A perfectionist beyond imagination.



Thomas Stubics

Recording, acoustics and rock music are his passion. He has almost 20 years of experience as product manager, project leader and acoustic engineer in the professional audio industry (AKG™, Harman™, sE Electronics™, ..) His masterpieces are AKG™ K271, K240, K812, C214, C414 XLS/XLII, P220, P820 Tube.



Bastian Bührig

IT-Specialist and dedicated prog-guitar-wizard. He loves cats and DIY-Audio-Projects. Always laid back and on hand with a good solution, when needed. Lives in and loves Hannover-Linden!



Andreas Gammauf

He is the most chaotic guy in the gang. Visionary, Slavedriver and professional disturber of the peace. Andy knows how to drive people nuts - but someone's got to do it. Advertising expert and IR-Freak.

A close-up, low-angle shot of a microphone grille, showing the fine mesh and the metallic casing. The lighting is dramatic, highlighting the texture of the grille against a dark, blurred background.

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