blue *Berlin* **session**

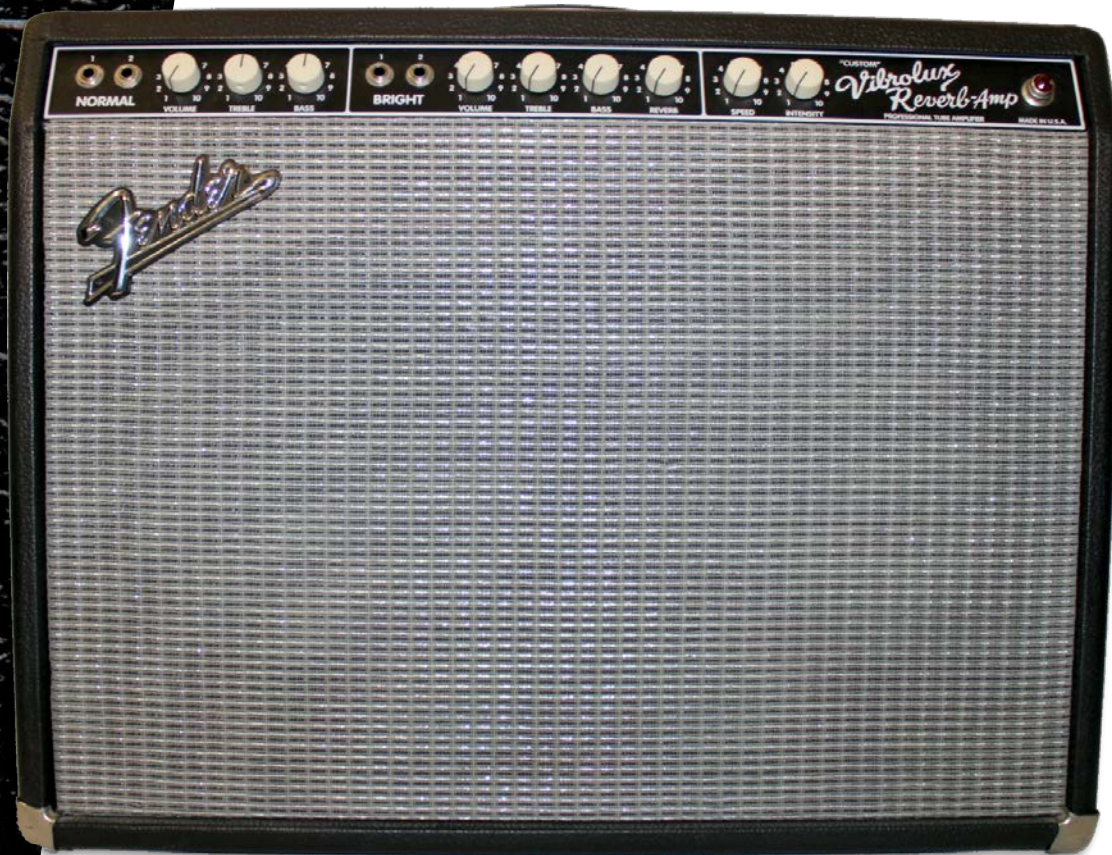focus IR series

SPEAKER CABINET
IR LIBRARY

cabIR.eu
fine impulse responses

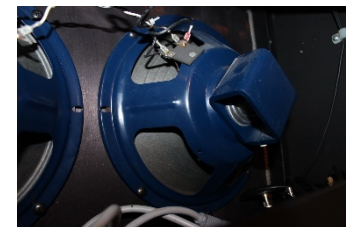# FE-VLUX91_EMI

based on a Fender™ Custom Vibrolux CSR8 from 1991 with
2x10" Emincence™ `blue frame` Alnico 8Ohm speakers.

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Special thanks

Dear cabIR.eu user

Thank you for your confidence and purchase of our IR library, which has been produced with great love, "know-how" and meticulous detail. Like all of our IR libraries, this priority always comes first: the accurate digital image of the speaker / cabinet compared to the real miced cabinet.

Who likes to read manuals? Well, to read it helps you to find the best IRs for you and your individual signal path quickly and purposefully!

Likewise, we want to give you some tips on how the individual folders are designed, and what you can expect from their respective content!

We hope you enjoy our IRs and we are sure that you will love them as much as we do!

Your cabIR.eu team

cabinet resonance frequency: 75Hz

Feature-set of the „focus IR series"

- **5 folder:**
    - **_QUICKSTART:** Quick overview and IR selection from the different folder categories.
    - **FOCUS:** Super balanced mix-IRs of the whole cabinet and individual speakers.
    - **MIC-CLASSICS:** Classic mixes of microphone pairs, such as Shure™ SM57 with Royer Labs™ R-121 or "front"- with "rear"-positions.
    - **SINGLE-MICS_MPT_minimal-phase**: Time aligned and phase-corrected for "in phase mixes". Single microphone positions (close & rear) of all 7 microphones of each speaker of the cabinet.
    - **SINGLE-MICS_RAW_real-phase:** Contains the authentic "pre-delay time", for "real-phase mixes". Single microphone positions (close & rear) of all 7 microphones of each speaker of the cabinet.

- **cabIR.eu „objective sweet spot method"**: Irrespective of subjective soundness or individual preferences, microphone positions determined for objectively best "sweet spots". Means: Maximum clear sound results of the selected microphone position when using different peripherals and individual signal paths.

- **cabIR.eu „idealized-NULL-Amp voicing"**: No influence of the "capturing-amp" included. Potential "coloration" of the amp was excluded 100% mathematically. Means: Authentic reproduction of the sound compared to the real miced cabinet: Exclusive sound mapping of the speaker / cabinet, microphone and used microphone position. The pure doctrine!

- **Microphones used** :
    - Shure™ SM57 (dynamic)
    - Sennheiser™ e906 (dynamic)
    - Sennheiser™ MD421 (dynamic)
    - AKG™ C414 XLS (condenser)
    - Neumann™ U67 (condenser)
    - Neumann™ KM 184 (condenser)
    - Royer Labs™ R-121 (ribbon)

Neumann ™ U67 in the U269 version with remote-controlled directional characteristic

Microphone legend:

- _57_ | Shure™ SM57 (dynamic)

- _906_ | Sennheiser™ e906 (dynamic)

- _421_ | Sennheiser™ MD421 (dynamic)

- _414_ | AKG™ C414 XLS (condenser)

- _U67_ | Neumann™ U67 (condenser)

- _184_ | Neumann™ KM 184 (condenser)

- _121_ | Royer Labs™ R-121 (ribbon)

Signpost for fast and accurate IR selection

TIP: Facilitate your life! Before you choose the best IR for you, set your amp to default settings! All controls at "12 o'clock"!

Note: The IR has a final effect on the frequency response of your entire signal chain - from the guitar to the amp used and its settings, right down to the IR, ie the miced cabinet simulation.
See the IR as a complement to the preceding signal chain! It completes and complements the preceding frequency response of your individual signal path.

First select the IR until the sound is at least in the desired "ballpark". Finally, you should make fine adjustments to the Amp EQ, if necessary.

You'll hear it: especially with high-quality digital modelers or software plugins, providing accurate amp simulation, you will not have to "amp-tweak" on these more as you are used to the real amp to create excellent sound.

Our cabIR.eu IR libraries make it easy for you to find excellent tone! That's all about it!

_QUICKSTART folder:

No time or desire to search long for a suitable IR? You want quickly get an overview of what the entire IR library has to offer? Then you are exactly right here!

A small selection of IRs from the FOCUS, MIX-CLASSICS and SINGLE-MIC folders can be found here for a quick start!

Note: Do not understand the _QUICKSTART folder as "best of". It should be a guide, an overview, demonstrate the characters of the individual microphone types or speakers and show the mix paradigms of the FOCUS- and MIX-CLASSIC folders.

TIP: Start with the FOCUS_CAB IR! It represents the sound of the whole cabinet and is very balanced.

FOCUS folder:

Do you want clear, maximally balanced IRs that simply work? Then the FOCUS folder is your first choice!

In the FOCUS folder you can find the FOCUS_CAB IRs (a mix of all speakers = the whole cabinet) and, if the cabinet has more than one speaker, the respective FOCUS_[speaker] IRs. The FOCUS IRs are the reference mixes for the sound of the entire cabinet, or individual speakers.
Example:
FOCUS_CAB (all speakers = whole cabinet)
FOCUS_A (= speaker A)

Furthermore, you will also find mixes of the cabinet, or the individual speakers, which exclusively contain one microphone type.
Example:
FOCUS_CAB_57 (all speaker with Shure™ SM57)
FOCUS_B_U67 (= speaker B with Neumann™ U67)

TIP: Start with the FOCUS_CAB IR! If applicable, the individual speakers. The FOCUS mix paradigm makes the mixes of the exclusively used microphones clearly distinguishable, especially in the bass range. If the pre-selection of the FOCUS IR is made, you can fine-tune the "low-end" by selecting dedicated microphone types! Try it!

MIX-CLASSICS folder:

Classic and proven combinations of microphone pairs that have proved their worth as standards in the studios all over the world due the years!

MIX_[Speaker]_57+121:
Mixed pairs with dynamic Shure™ SM57 and ribbon Mic. Royer Labs™ R-121.
Example:
MIX_A_57+121_2 (speaker A ; _2 = mix variant 2)

MIX_[Speaker]_57+421:
Mixed pairs with dynamic Shure™ SM57 and dynamic Sennheiser™ MD421.

MIX_[Speaker]_57+U67:
Mixed pairs with dynamic Shure™ SM57 and large-diaphragm condenser Neumann™ U67.

MIX_CAB_rear+57
Mix pair with dynamic Shure™ SM57 (front Mic.) and small-condenser Neumann™ KM 184 at „rear cabinet" position.
Example:
MIX_CAB_rear+57 (mix with all speaker (=CAB))

MIX_CAB_rear+421
Mix pair with dynamic Sennheiser™ MD421 (front Mic.) and small-condenser Neumann™ KM 184 at „rear cabinet" position.

MIX_CAB_rear+U67
Mix pair with large-diaphragm condenser Neumann™ U67 (front Mic.) and small-condenser Neumann™ KM 184 at „rear cabinet" position.

TIP: Do not overlook at the MIX_CAB_rear+57/421/U67 mixes! By adding the "rear" position, these IRs get their very special character, a softer "top-end" in the heights and "body" of the cabinet. Maybe exactly what you are looking for?!

SINGLE-MICS folders:

You prefer the character of a specific microphone type? Or you prefer to mix your individual microphone mixes out of the single microphone positions? Here you will find all the options you need! The "heart" of every IR library! In the SINGLE-MICS folders, you will find at least 3 variants or microphone positions, which have been positioned in front of the speaker according to our "objective sweet spot method", for each microphone type and speaker!

Note: The differences between the "minimum phase" (MPT) and the "real phase" (RAW) variants of the SINGLE-MICS are only fully achieved with mixtures of at least two individual microphone positions:

SINGLE-MICS_MPT_minimal-phase folder
IRs the MPT folders are "minimal phase transformed": These do not contain any runtime information or "pre-delay offset" and are phase-neutral and time-aligned.
Example:
_A_906_M3 (Speaker A, Sennheiser™ e906, M (=MPT), free position variant 3)
_rear_184_M1 („rear Cabinet" – Position, Mikrofon Neumann™ KM 184, M (=MPT), position variant 1)

TIP: These MPT-IRs are suitable for mixing when no phase cancellations are desired. MPT-IRs are "time-aligned", always behave phase synchronous. Very "direct", "in your face"
and transparent mix results can result.

SINGLE-MICS_RAW_real_phase folder
IRs of the RAW folders contain the authentic "pre-delay" running time (from the speaker membrane to the microphone capsule). They are not phase-neutral during mixing. Comb filter effects can result.
Example:
_B_121_R1 (Speaker B, Royer Labs™ R-121, R (=RAW), free position variant 1)
_rear_184_R2 („rear Cabinet" – Position, Mikrofon Neumann™ KM 184, R (=RAW), position variant 2)

TIP: These RAW IRs are suitable for mixing, if deliberately easy phase cancellations are to be achieved. Phase extinguishments or resulting comb filter effects can cause the "top-end" "soft", resulting mix IRs can result in less "harshness", but with lots of character. In contrast, RAW mix IRs can appear less "direct" or "in your face".

Technical details:

FE-VLUX91_EMI impulse response library:
Based on a Fender™ Custom Vibrolux CSR8 from 1991 with 2x10" Emincence™ `blue frame` Alnico 8Ohm speakers.

Resonance frequency of the FE-VLUX91_EMI cabinet:
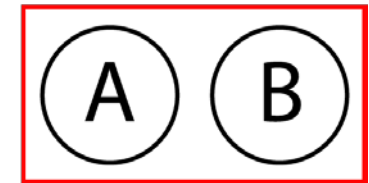- 75 Hz

IR number of the FE-VLUX91_EMI library:
- _QUICKSTART folder: 12
- FOCUS folder: 24
- MIX-CLASSICS folder: 15
- SINGLE-MICS folder: 75
  (each as MPT and RAW version)
- Unique IRs in total: 114

Speaker locations
- 2 speaker cabinet

cabIR.eu „idealized-NULL-Amp voicing"
No influence of the "capturing amp" used. Potential "staining" of the amp is excluded 100% mathematically.

cabIR.eu „objective sweet spot method"
Irrespective of subjective soundness or individual preferences, microphone positions determined for objectively best microphone positions.

Available formats
500 ms | 44.1 kHz-16 bit | wav
500 ms | 44.1 kHz-24 bit | wav
500 ms | 48 kHz-16 bit | wav
500 ms | 48 kHz-24 bit | wav
500 ms | 96 kHz-24 bit | wav

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

Note: The 500ms versions include, compared to the 170ms versions, a minimum of more space information, a touch more "air", if the "IR player" can handle the full length, such as a convolution reverb.