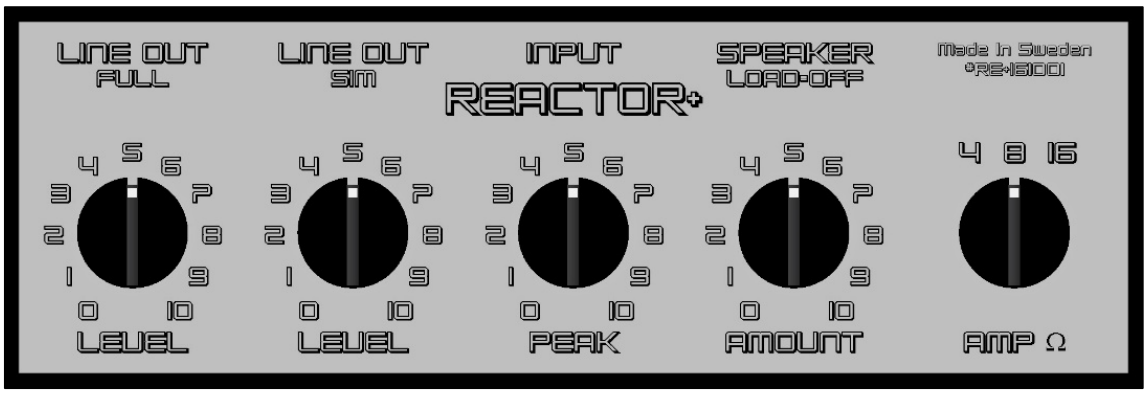
MASTERPLANT™

passive electronics, active sound

REACTOR +

Recording has changed a lot with almost everybody having a home studio of sort. This has also lead to the demand for the ability to record silently. Load boxes have been in use since the first tube amplifiers but it has been revealed that a standard resistive one might not always be the best sonically. This reactive load/speaker simulator will simulate the impedance and frequency characteristic of an old 4x12 greenback speaker cab with some tweaks added.

- 150W reactive load with analogue speaker simulation
- Supports 4Ω-8Ω-16Ω amplifiers
- Speaker simulated balanced line out
- Full range unbalanced line out that doubles as a bedroom level attenuator output

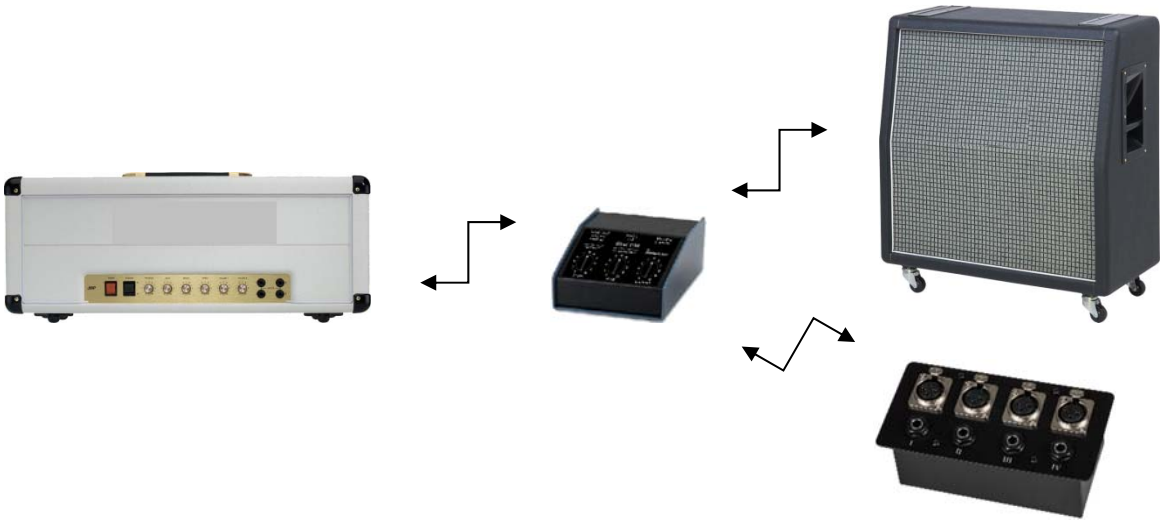


LEVEL sets the output of the Line Out signal
PEAK controls the boost of frequencies normally pronounced by a close-miked speaker cab
AMOUNT controls high and low frequencies to be passed through the circuit
SPEAKER jack disables the internal load
AMP Ω sets the input impedance

Silent Recording

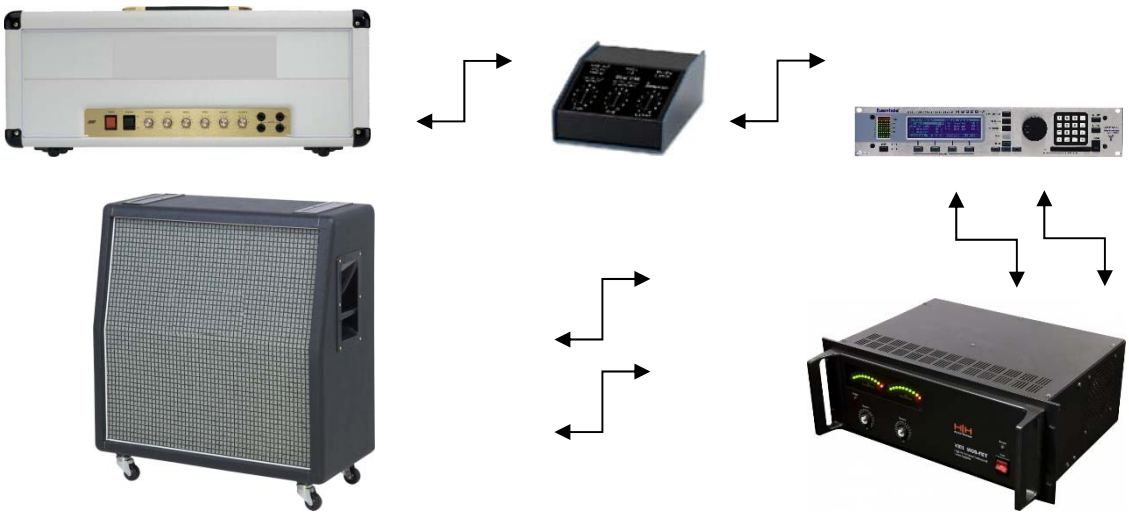
1) Set REACTOR to match amp impedance
2) Connect amp speaker out to REACTOR input
3) Connect REACTOR balanced line out to mixer or audio card
4) Adjust speaker simulation to taste
5) Use the full range output if you wish to use impulses in your DAW

Live with optional speaker



1) Match amplifier impedance to REACTOR or speaker
2) Connect amp speaker out to REACTOR input
3) Optionally connect REACTOR speaker out to speaker (Disables internal load)
4) Connect REACTOR balanced line out to stage box
5) Adjust speaker simulation to taste

Live stereo amp slave



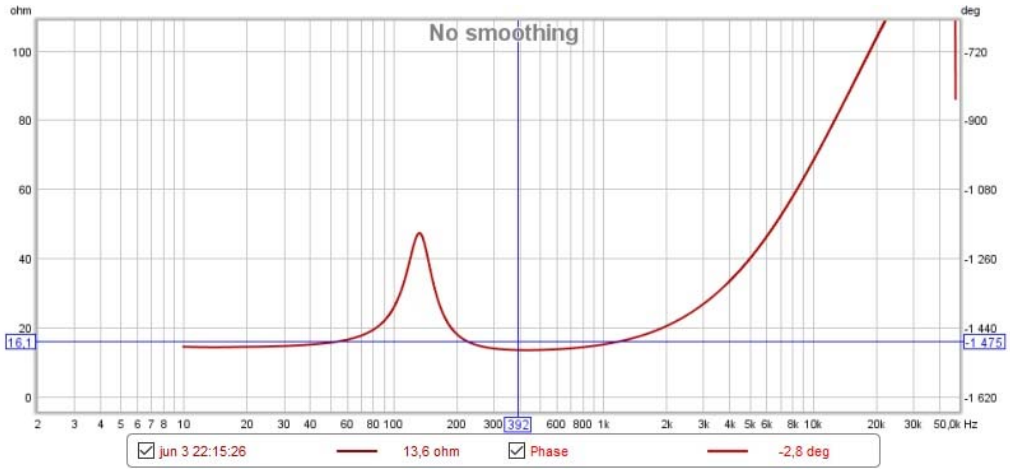
1) Set REACTOR to match amp impedance
2) Connect amp speaker out to REACTOR input
3) Connect REACTOR full-range line out to stereo effect
4) Connect effect stereo out to power amp line inputs
5) Connect power amp speaker outs to stereo cab

Do not block the ventilation holes.

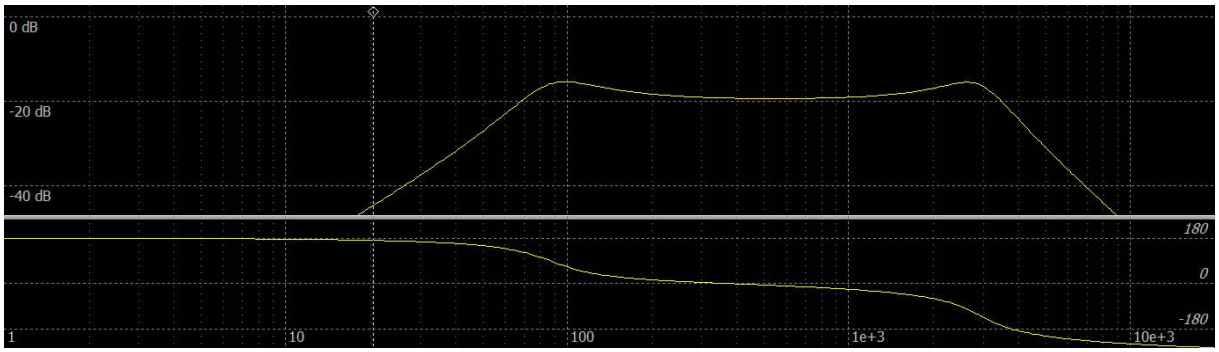
Observe that connecting anything to the speaker out jack disables the internal load and your tube amp must always be loaded.

Avoid mismatching impedance as that will put unnecessary strain on your amp and can lead to damage of transformers and tubes.

Impedance plot



Frequency response (all controls at max)



FAQ

Can I use this unit with any amp or speaker?

The internal load is switchable between 4Ω-8Ω-16Ω so your amp should match that. Connecting a speaker to the speaker out disables the internal load so your amp should then match your speaker.

Can I crank my amp with four EL34 or 6L6 output tubes?

Yes, but make certain that the ventilation holes are not covered.

Can I use it with a guitar preamp such as the ENGL E530

Yes, but you need to disable the internal load by connecting a cable to the SPEAKER out jack. It will now function as our Speaker Simulator “SIM”. Connect it to a microphone input as it has more gain available.

Can I connect a pair of headphones to it?

Yes, connect the headphones to the balanced output and adjust the speaker simulation. This will give you a pseudo stereo effect.

Can both Line Outputs be used simultaneously?

Yes, the full range output allows you to use your own impulses.

Is there an attenuated speaker output?

Sort of, this is a reactive load box but the full range line out has enough power to drive a speaker cab to loud bedroom level.

TECH SPEC

- **Input Power:** 150W 4Ω-8Ω-16Ω
- **Input:** ¼" TS phone
- **Line out balanced speaker simulated:** <100Ω ¼" TRS phone
- **Line out unbalanced full range**: <100Ω ¼" TS phone
- **Speaker out** (Disables internal load): ¼" TS phone
- **Dimensions**: L: 8,2" W: 6,5" H: 3" – L:209mm W: 165mm H: 76mm
- **Weight:** <2kg - 4.4lbs

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2 year limited warranty

The warranty applies to defective material and workmanship and for the original purchaser when bought from MASTERPLANT or authorised dealer. Opening the unit will void the limited warranty and any required service or update must be performed by MASTERPLANT. A copy of the original receipt must be included with the unit. Warranty will not cover damage caused by misuse or accidents. It will not cover any damage inflicted to other equipment resulting from impedance mismatching or any other faulty use.