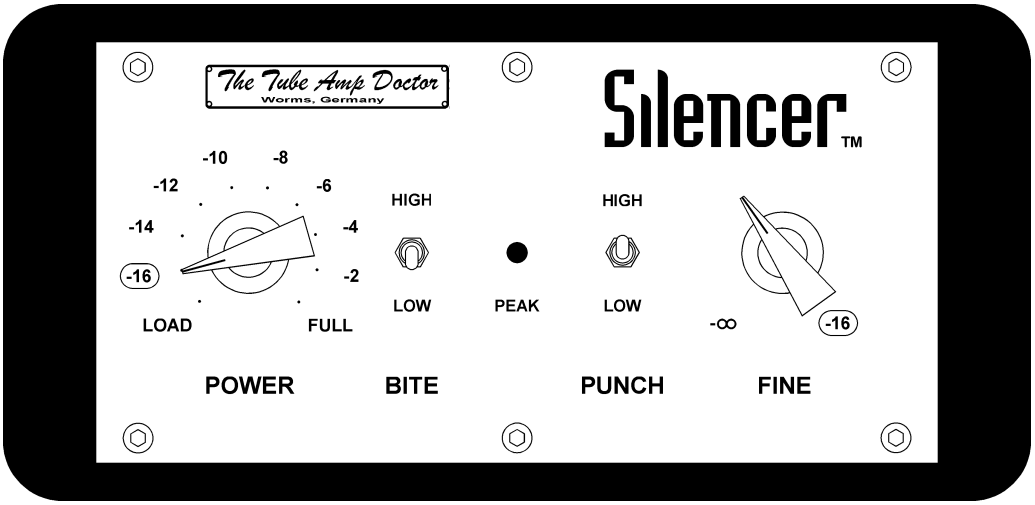
The Tube Amp Doctor
Worms, Germany

Silencer™

Owners Manual



- Natural Tone Technology, clear high end responce
- Available as 2, 4, 8 or 16 Ohm version
- 2db attenuating steps from –2db to –16db
- “Fine“-Control from –16db
- 2-step BITE and PUNCH Boost-Switch
- “LOAD” position for use without speaker
- 150 Watt RMS (2 Ohm version: 75 Watt), with PEAK Control
- Adjustable LINE-Out
- F.A.N.T.A.-Out Speaker-Emulation, low Z, symmetric
- Classic Amp-Cabinet Design with Tolex™ or Tweed

Descritption

Why use a Silencer™ power attenuator?
The Silencer™ is used to reduce output power and volume.
Many popular rock guitar sounds are based on the well known sounds created by the guiatr legends of the sixties and seventies. P.A. systems of the todays standard were not available at this time or were mainly used for the vocals so the guitar players cranked up their amps to full volume to be heard. Tube guitar amps do sound best when played loud because the output stage starts to saturate and delivers the most musical and harmonic distortion, wonderful sustain and a thick tone with overall response.
This is what we all look for but if a 50 or 100 Watt amp is played at full volume then it gets so loud that you might damage your ears and you might anoy your audience, musicians or just your neighbors.
The Silencer™ solves this problem.

How does the Silencer™ work?
It is connected between the amps speaker output and the speaker(s) (or speaker cabinet) and gives total control on what part of the power output will be feed to your speakers. The waste parts of power will be converted to heat. So you can crank up the amp to the setting were it sounds best and adjust the final volume just for your speakers. All components which are responsible for great guitar tone are still working “cranked up” to your favorite set-up (preamp tubes, driver stage, output tubes, transformers etc.) and deliver great tone. The final volume you hear is adjusted AFTER the amps output.
The power attenuation can be set in convenient 2db steps from FULL power to –16db. From –16db on you can fine adjust to total silence.

Why does the Silencer™ offer BITE and PUNCH boosts?
Since our ears do hear less TREBLES and BASS on low volume signals (physio-acoustic effects) the Silencer™ does feature a 3-position BITE switch to boost the high end and a 3-position PUNCH switch to boost low mids and bass response.

Does the Silencer™ affect the tone quality like common attenuators?
Usually power attenuators steal brightness and definition in bass frequencies the more they attenuate the power. The Silencer™ features our new “Natural Tone Technology” which is not affecting the brightness or the definition of the guitar signal. It will keep all it’s clearity.

Can I use the Silencer™ without speakers?
With the POWER switch in “LOAD” position the Silencer™ will work without any speaker connected. It works as a plain Load-Box. The signal can be taken from the adjustable LINE-Out (plain) or from the F.A.N.T.A.-Out to feed a recording system, the mixing console, a slave amp etc.
This is a common setting for in-ear-monitoring or home recording.

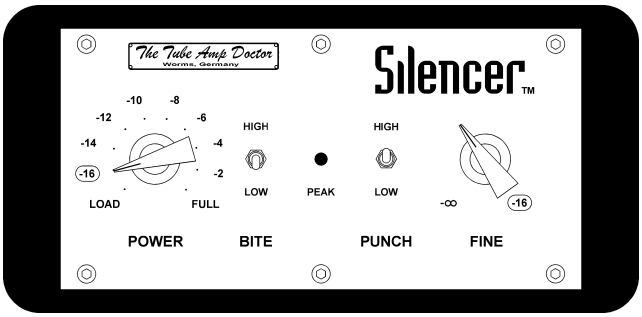
How does the LINE-Out and the F.A.N.T.A. Speaker Simulation work?
The LINE-Out is an unfiltered output with adjustable volume as used to feed LINE-Level devices. It uses a ¼” phone jack (mono). The F.A.N.T.A. (***F***requency ***A***dapted ***N***atural ***T***one ***A***ccessory) Speaker Emulation is a low impedance, balanced symmetric,tr ansformer coupled output. It provides a 3-pin XLR-Connector for a standard microphone cable to connect to the mixing console, recording system etc.. The signal runs trough a sophisticated speaker emulation which featurws unique quality: it is reacting to your playing style!
Clean signals will sound clear and bright with only slight compression but if you play distorted the emulation will sound smooth, punchy and big bottomed with good compression. Just what you expect from the perfect speaker cabinet.
This is what separates the Silencer from most common speaker emulators; …the F.A.N.T.A. Emulation will respond to your playing and reacts like a real speaker system.
You won’t need to mic the amp anymore.

Can the Silencer™ damage my amp or speakers?
No! The Silencer™ is made exactly to the specs of the impedance it bears. If power gets attenuated then your speaker(s) will work safer than under real full power. If you play loud your tubes will wear out a bit faster, but since the Silencer™ is matched exactly to your amps impedance this effect is rather low.
However; every tube amp needs to see a load. It is dangerous to drive a tube amp without a load so make sure to use good speaker cables. This is true for all tube amps and not only the use with a Silencer™.

Technical Data:

- Maximum amp output power: 150W RMS (75W RMS at 2 Ω version)
- Attenuating steps 0dB to -16 dB in 2 dB steps, from –16dB fine adjustable till -∞
- F.A.N.T.A. OUT: transformer coupled, balanced symmetric, ground lifted, XLR3 (1 = GND/NC / 2 = + / 3 = -), Impedance 600 Z
- LINE OUT: unbalanced, ¼“ phone jack, adjustable, impedance 25 kZ
- Dimensions (W x H x D): 245 x 120 x 200 (mm)
- Weight: aprox. 3,5 kg

Front Panel Controls:



POWER: 10-step rotary switch for power attenuating in 2dB steps to –16dB. The “FULL” position is a real hardware by-pass and doesn’t affect the signal at all. In “LOAD” position the Silencer™ works as a plain load-box and needs no speakers.

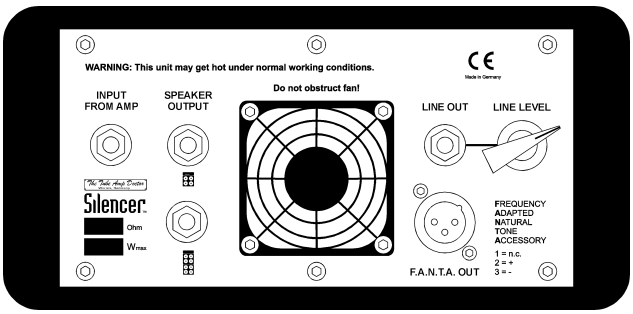
BITE: 3-step switch for boost of higher frequencies. The mid position is “OFF”, “LOW” will boost higher mids and trebles and “HIGH” will boost trebles only.
NOTE: The BITE switch does work with the power switch in position –2dB to –14dB only.

PEAK: Indicates overload of the Silencer™ (maximum power 75W for 2 Ohm version, 150W all other versions). An occasional flashing is no problem. Permanent lightning of the PEAK LED indicates a heav overload which may damage the Silencer™.

PUNCH: 3-step switcht for boost of lower frequencies. The mid position is “OFF”, “LOW” will boost deep bass only while “HIGH” will boost bass and low mids.
NOTE: The PUNCH switch does work with the power switch in position –2dB to –14dB only.

FINE: In position „-16“ of the POWER switch, the FINE control is active. It allows a smooth control from –16dB to −∞dB.
NOTE: The BITE- and PUNCH-switches are not active.

Back panel controls:



INPUT FROM AMP: ¼“ phone jack connector taking the the signal from the speaker output of your amp. The impedance of your amp should match with the impedance of your Silencer™ as indicated on the back panel.

SPEAKER OUTPUT: Two ¼“ phone jack connectors feeding your loadspeaker(s). The total impedance of the connected speakers should match with the impedance indicated on the back panel of your Silencer™.

LINE OUT: Linear ¼“ phone jack connector, unfiltered, unbalanced

LINE LEVEL: Controls output level of the LINE OUT

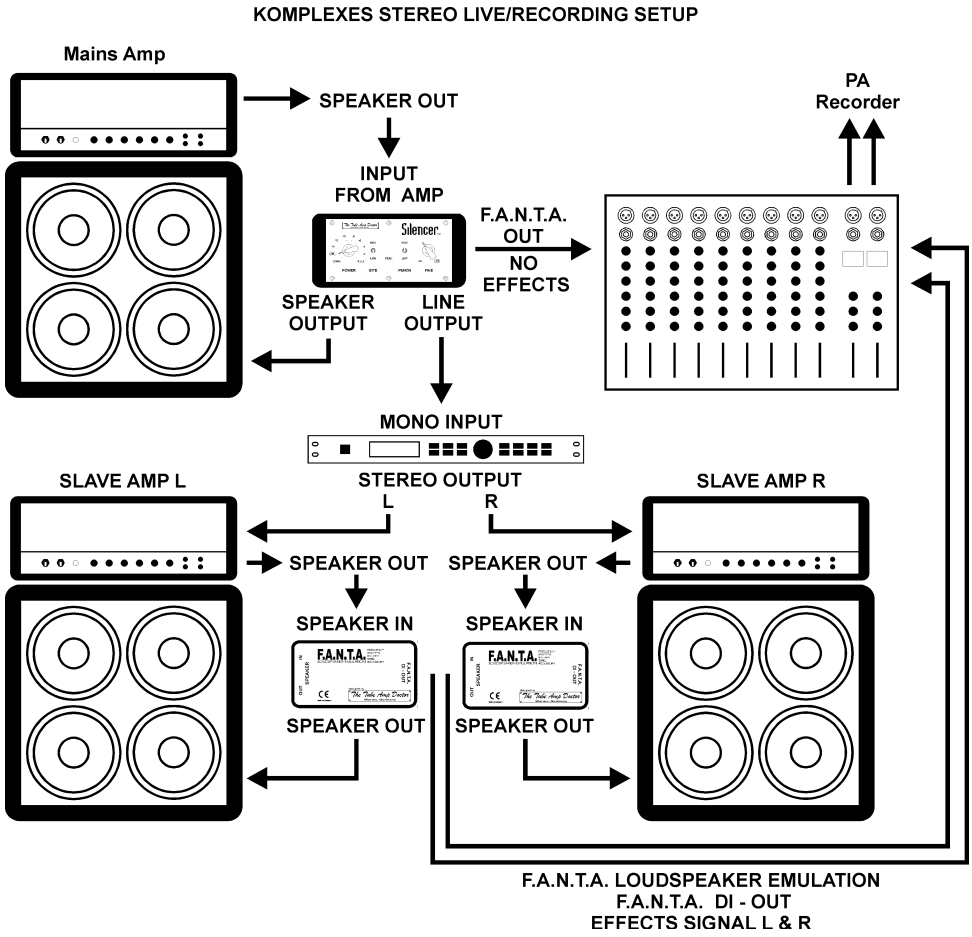
F.A.N.T.A. OUT: ***F***requency ***A***dapted ***N***atural ***T***one ***A***ccessory
Low Z, ground lifted XLR3 jack to connect the Silencer™ directly with the mixing console or recording system with a standard microphone cable. The F.A.N.T.A. OUT signal has been voiced by a speaker emulation and its level is not affected by the POWER/FINE controls, not by the BITE or PUNCH switches and not by the LINE LEVEL control.
The F.A.N.T.A. OUT is dedicated to picking up the amps signal instead of using a micrphone (or additional!) for mixing and/or recording.

Application examples

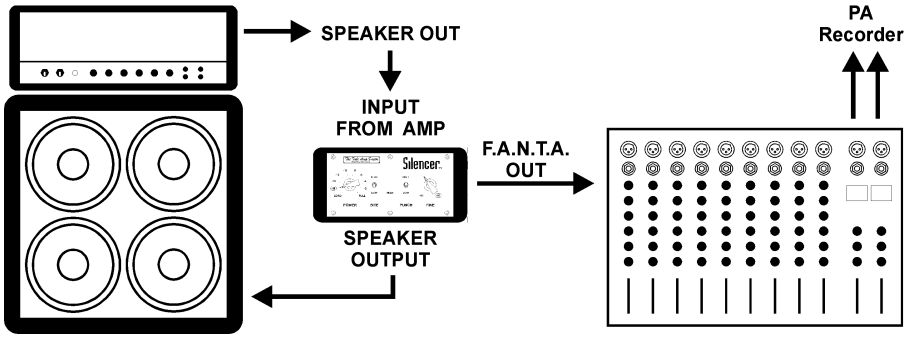
Power attenuation to reduce volume for live playing or recording:

1. Use a speaker cable to connect the speaker output jack of your amp with INPUT FROM AMP of the Silencer™.
2. Connect the upper SPEAKER OUTPUT jack (with the one-cabinet-icon) of the Silencer™ with your speaker cabinet. An additional cabinet can be connected with the lower SPEAKER OUTPUT jack of the Silencer™ (with the two-cabinet-icon). The total load of the connected cabinets must match the impedance of your amp and of the Silencer™.
3. Connect the F.A.N.T.A. OUT with a standard microphone cable with your mixing console.
4. Set the POWER switch to FULL and switch on the amp. Now you adjust the desired volume with the POWER switch and the FINE control. BITE and PUNCH switches are effecting the sound for the cabinet(s) connected to the SPEAKER OUT jack(s).

Additional: The LINE OUT may be connected to an effect device and feed additional amps to create a stereo setup.



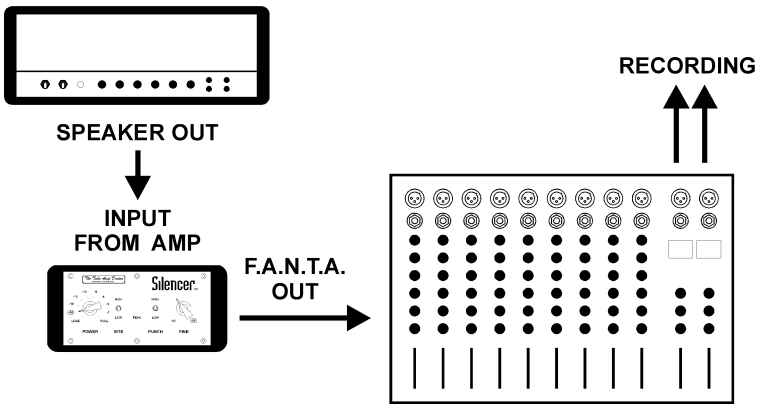
TYPISCHES LIVE / RECORDING SETUP



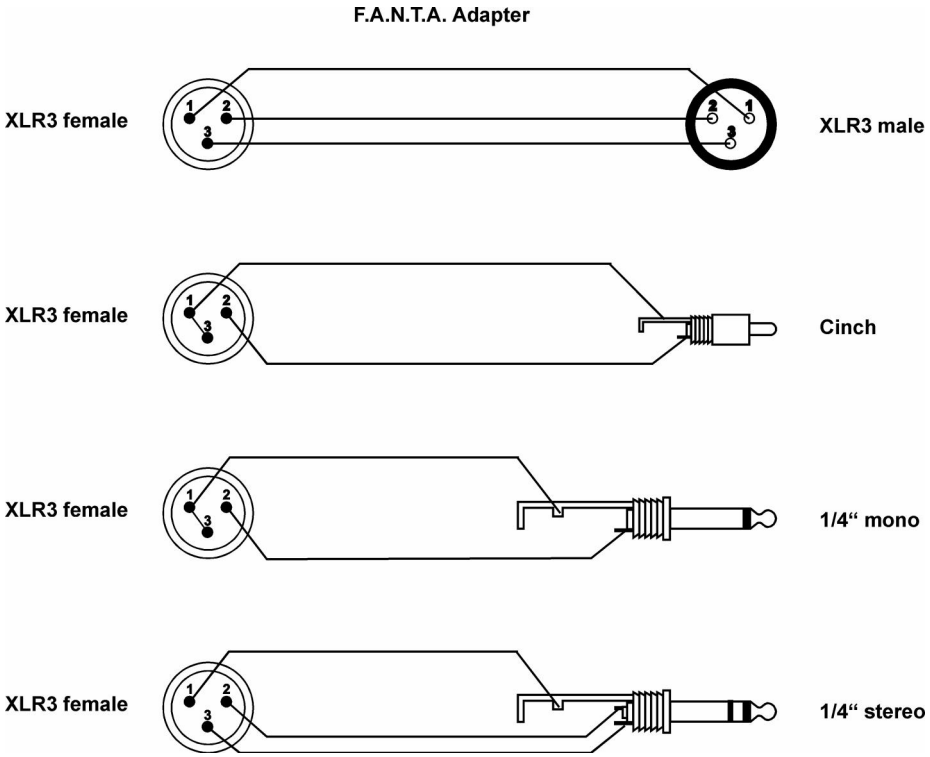
Loadbox use without speakers for recording or monitoring:

1. Use a speaker cable to connect the speaker output jack of your amp with INPUT FROM AMP of the Silencer™.
2. Connect the F.A.N.T.A. OUT with a standard microphone cable with your mixing console.
3. **IMPORTANT:** Set the POWER switch to LOAD posititon. This is the only (!) position the Silencer™ can be used without speakers.
4. Switch on amp and play as usual. To hear your playing you need a monitoring system.

TYPISCHES RECORDING SETUP



Wiring diagram for F.A.N.TA. OUT to several plugs:



Note:

- For connecting amps, cabinets and the Silencer™ it is recommended to use good quality speaker cables (min. 2 x 0,75 mm^2) with ¼“ phone plugs. Defective speaker cables may harm your amp.
- All vents must not be blocked! If vents are covered then the Silencer™ might overheat, get damaged and might harm your amp.
- Tube life is always depending on the power the tubes have to deliver. If you crank up the amp more then the tubes deliver more power and wear out somewhat faster.
- All wirering should be made with the ampliefier switched off and disconnected from wall AC.

WARNING:

Device gets hot under normal operation. Do not touch metal parts of the Silencer™. Do not cover the vents on the top and back side of the Silencer™.