

FISCHER AMPS

OPERATING INSTRUCTIONS

Guitar Genius



Dear customer:

You have decided to buy a *Fischer Amps* product. Thank you.

Please read this manual carefully prior to the first use, you will get important information for use and safety of the unit. These safety and operating instructions should be retained for future reference.

Should you have further questions, please do not hesitate to contact *FISCHER AMPS*.

Product Description:

Guitar amplifiers with a tube power amp are very popular but have the problem of having to be turned up to very loud volumes in order to achieve that sound of power stage distortion we all love. The Guitar Genius allows to drive the power stage of a tube amp to the maximum whilst still playing at suitable volume levels for at home, or even silently using headphones or in-ear monitoring. The integrated Loadbox in the Genius Box exactly reproduces the impedance of a 4x12 speaker cabinet and is more than just a simple load resistance. This is crucial for the sound of the driven tube power stage. Optionally, the speaker cabinet can also be connected to the Loadbox. It is then supplied with approximately 40% of the emitted tube amplifier signal with 12 different switchable volume levels. The amplifier signal can be picked up from two transformer-balanced outputs on the Guitar Genius via a speaker simulation of a 4x12 speaker cabinet with four switchable characteristics. The "Line-Out" on the front panel is for direct connection to the "Aux-In" on the Fischer Amps In Ear Amp.

This way the guitar amplifier can be recorded or used for practice silently or at reduced volume. The guitar setup on stage can also be operated at reduced volume or silently using the in-ear monitoring.

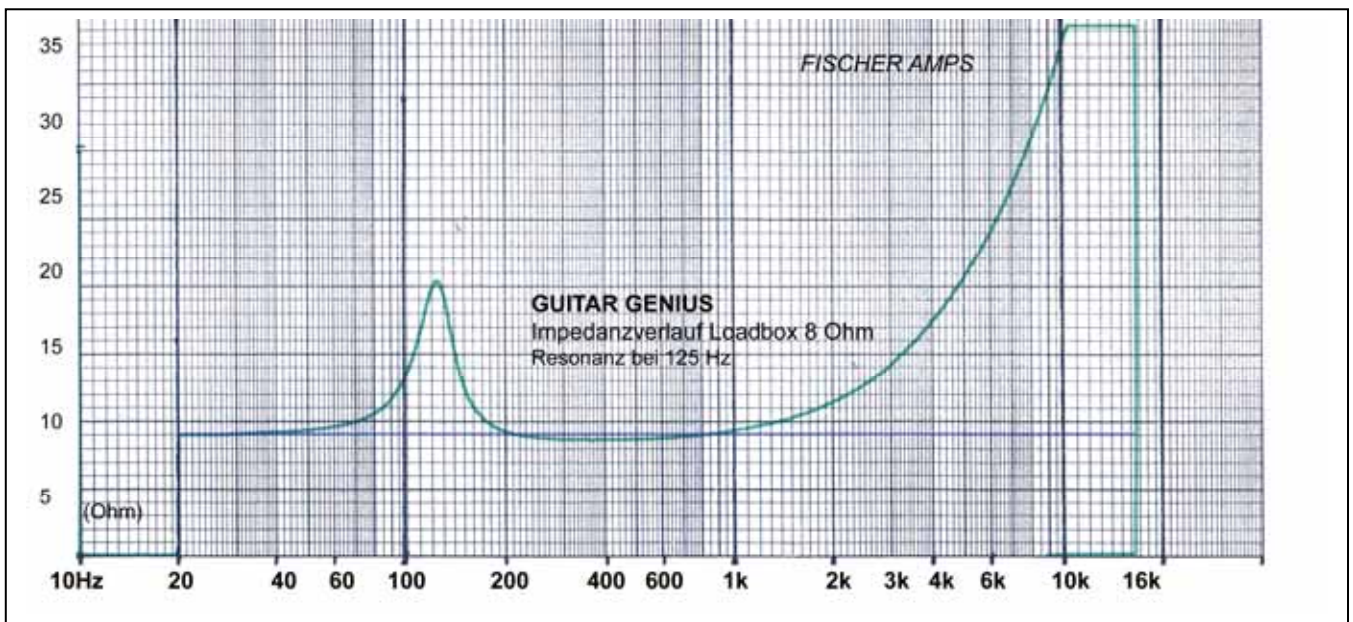
The combination of Fischer Amps In Ear Amp and the Guitar Genius allows to mix the guitar signal from the amplifier with the "Stereo/Mono-In Ear Mix" or with a backing track for practice purposes. The Guitar Genius has an additional XLR headphones out so that the Fischer Amps Guitar In Ear Cable can be used for the guitar signal and the Stereo In Ear Mix.

The features of the Guitar Genius:

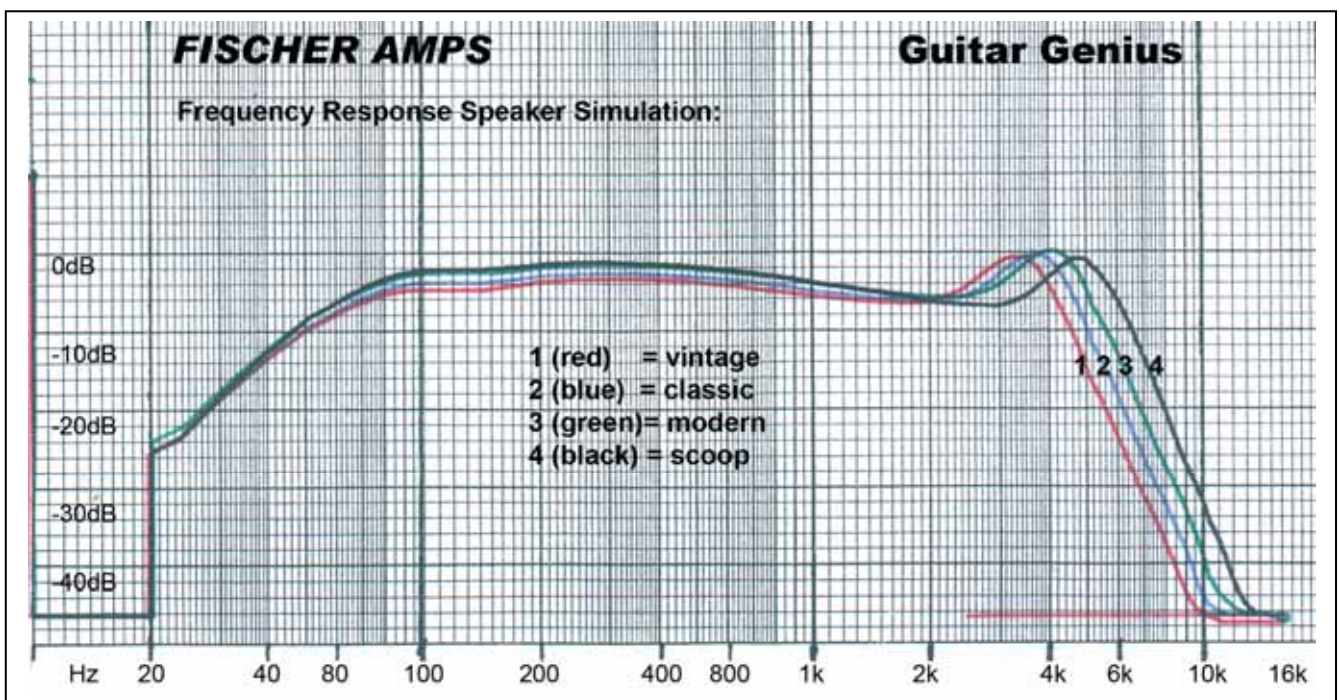
- Guitar-Loadbox with reduced volume speaker output at 12 switchable volume levels with faithful reproduction of the impedance of a 4x12 speaker cabinet.
- Toggle switch on the back panel for "Full Power" mode (without Loadbox)
- Speaker simulation with four switchable sound characteristics (vintage, classic, modern, scoop) and two transformer-balanced line-outs.
- "Line-In" for connecting guitar preamp line signals

See below for two graphs which further explain the product description:

Impedance Curve of the Guitar Genius:



Frequency Curve of the Speaker Simulation:





Description of the Operating Controls (Front Panel):

(1)

Front Panel Line Out
asymmetrical:

Transformer-separated line-out for speaker simulator signal, for instance, for connection to an optional Fischer Amps In Ear Amp. This gives you the option of mixing the speaker-simulated guitar signal from the amp with the In Ear mix or a backing track on the "In Ear Amp". The output level depends on the output of the connected amplifier and stands at -16dB. The output levels can be taken from the table in the technical data for the Guitar Genius (see page 6).

(2)

Ground Lift
Front Panel Line Out:

Disconnection of the line-out on the ground side in case of problems with buzzing which may have been caused by a ground loop. The "Ground Lift" is active when the button is pressed.

(3)

Sound Mode Selection Buttons
for Speaker Simulation:

You can use both these buttons to set the four different speaker simulation sound variations.
You can use these four extremely practical simulation variants to make the appropriate preset for the particular amp sound you are looking for. Simple, effective and free of any unnecessary gimmicks!

(4)

Volume Control
Guitar Cabinet

When the Guitar Genius is used in Loadbox mode, you can use it to direct approximately 40% of the actual output from the amp to the speaker cabinet. You use the volume control to set the level of output to the speaker cabinet to 12 switchable levels.
In the (0) position the speaker cabinet is completely switched off. Position (1) achieves volumes suitable for at home when playing a 100 watt amp which is driven hard and loud. In position (12) approximately 40% of the total amplifier output is directed to the speaker cabinet - and that's a great deal! The 12 levels are tapered logarithmically which means that these 12 levels can cover a very large and practical range of volumes.

Operating Controls and Connections on the Back Panel



(1)
Input for the
Amp Signal

Connect this Guitar Genius input to the speaker output on your guitar amp. The Guitar Genius is equivalent to an impedance of 8 ohms, therefore you should ideally use the 8 ohm output on your amp or set the impedance switch on the amp to 8 ohms. If 8 ohms is not available, it is better to use the 16 ohm output than the 4 ohm output in order to ensure that the power stage output can be adapted and the power stage can be loaded in the optimum manner.

It is imperative that you use speaker cable of at least 1.5 sqmm to connect the speaker output.

**You must not use a normal guitar cable for this purpose!
Otherwise you may cause considerable damage to your amp.**

(2)
Toggle Switch: "Load Box" /
"Full Power" mode

When this switch is in the "Load-Box" position, the Load-Box on the Guitar Genius and the volume control on the front panel are both active. This setting enables you to use your amp even without the speaker connected to the Guitar Genius. For example, for recording or silent practice, using just as set of headphones together with the Fischer Amps In Ear Amp....

However, if you do get the chance to play on a 25m open-air stage, the Loadbox on the Guitar Genius can be switched off completely ("Full Power" mode). The full output from your amp is then directed to the speaker cabinet (e.g. it will be really loud). You can of course continue to use the speaker simulation and the two line-outs on the Guitar Genius.

Important:

When set in the "Full Power" position, it is imperative that there is a speaker cabinet connected to the Guitar Genius "Cabinet-Out" as the power stage of your amplifier will otherwise become damaged.

(3)
Output to Speaker Cabinet

Connect this Guitar Genius input to your speaker cabinet. If you do not require a speaker cabinet, you can do without a speaker cabinet when the switch is in the "Load-Box" position.

It is imperative that you use speaker cable of at least 1.5sqmm to connect the speaker output.

**You must not use a normal guitar cable for this purpose!
Otherwise you may cause considerable damage to your amp.**

(4)
XLR Line-Out

Transformer-balanced XLR line-out for the speaker simulation amp signal for connecting to professional audio equipment. The output impedance is 600 ohms, the output level depends on the output of the connected amplifier and stands at -10dBV . The output levels can be taken from the table in the technical data for the Guitar Genius (see page 6).

(5)
Ground Lift
for back panel XLR Out

Disconnection of the line-out on the ground side in case of problems with buzzing which may have been caused by a ground loop. The "Ground Lift" is active when the button is pressed.

(6)
Back panel Line-In

The Guitar Genius also has an additional asymmetrical line-in jack so that you can also refine signals from guitar preamps without speaker simulation using the simulation sound of the Guitar Genius. The maximum input level for this input is $+10\text{ dB}$. The output levels can be taken from the table in the technical data for the Guitar Genius (see page 6).

Important information:

When there is a plug in the line-in, the signals from the Loadbox and the speaker simulation are automatically separated.

The Loadbox of course continues to function but no longer directs a signal to the speaker-simulated line-outs.

Safety Instructions for the Guitar Genius:

The speaker cabinet on the amplifier side should be connected using suitable speaker cables. You must not use instrument cables as they do not have a sufficient diameter and may burn through.

In extreme cases the Guitar Genius has to burn 120W, i.e. this much heat can be released into the environment. Therefore, if you are rack-mounting the device, you should leave at least 10 mm of space above it to allow air to circulate. The ventilation slots on the device must not be covered or sealed in any way during operation as the device may otherwise overheat.

The Guitar Genius contains inductive components designed to reproduce the exact impedance of a speaker cabinet. If the devices are installed unsuitably or in an unsuitable constellation, these components may cause interference in a very susceptible device. In this case, try and make sure that the Guitar Genius occupies the top spot in the rack. Even with a 19"-1HE combination of Guitar Genius and the In Ear Amp the In Ear Amp should always be installed on the left and the Guitar Genius on the right (viewed from the front).


In case you experience problems with buzzing due to a ground loop after connecting cables, the Guitar Genius has a separate ground lift switch for each line-out of the speaker simulation signal.

The power stage valves and the preamp valve are of course subject to deteriorate more quickly when driven heavily - as is the case in Loadbox mode. Accordingly, the power stage valves will of course have to be replaced more frequently.

Technical data Guitar Genius			
Dimensions: L x W x H:	220 x 190 x 43 mm		
Weight:	2.5 kg		
Frequency Response:	See graph		
Maximum Input:	120 watts music power (guitar amp signal)		
Inputs:	1 x guitar amp in, 6.3 mm mono jack 1 x line-in, 6.3 mm mono jack		
Outputs:	1 x guitar cabinet out (Loadbox) 1 x transformer-balanced speaker-simulated line-out, back panel (XLR) 1 x transformer-balanced speaker-simulated line-out, front panel (jack)		
Output level to the Line-Outs:	Input power from guitar amp	XLR line-out	Jack line-out
	100W	-10 dB	-16dB
	50W	-13 dB	-19 dB
	30W	-16 dB	-22 dB
	Line-in mode Input level		
	+10 dB	+5 dB	-1 dB
	+4 dB	- 1dB	-7 dB
	0 dB	-5 dB	-11 dB
	-10 dB	-15 dB	-21 dB

WARRANTY:

The manufacturer provides a 24 month warranty, starting from the date of purchase, for material and production faults. The warranty shall be rendered null and void in case of improper use or modification of the device. If returning the device, please enclose proof of purchase. Returns sent carriage forward will not be accepted.

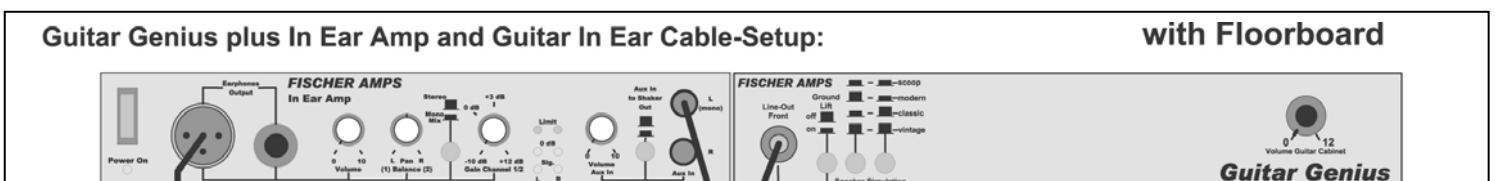
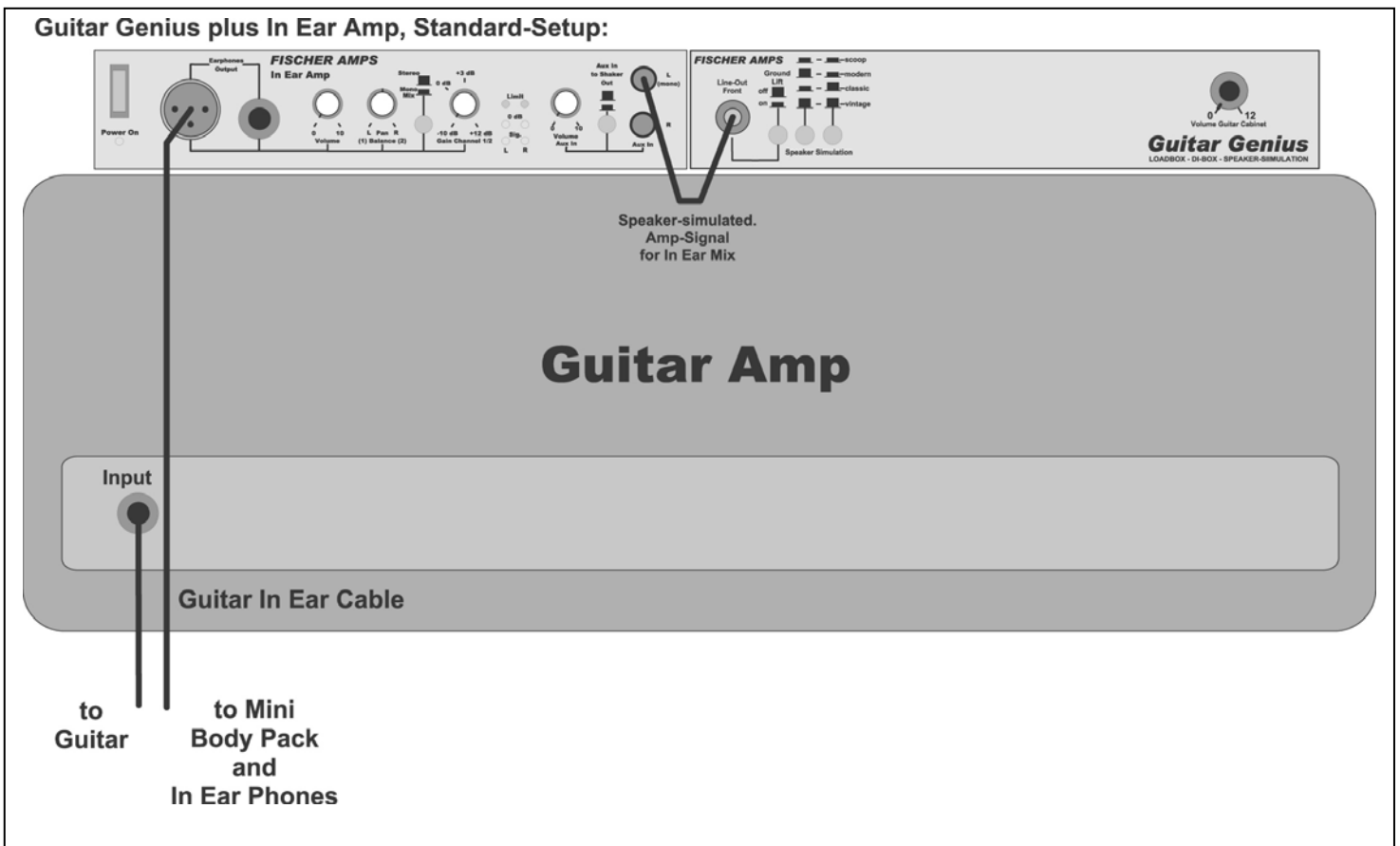
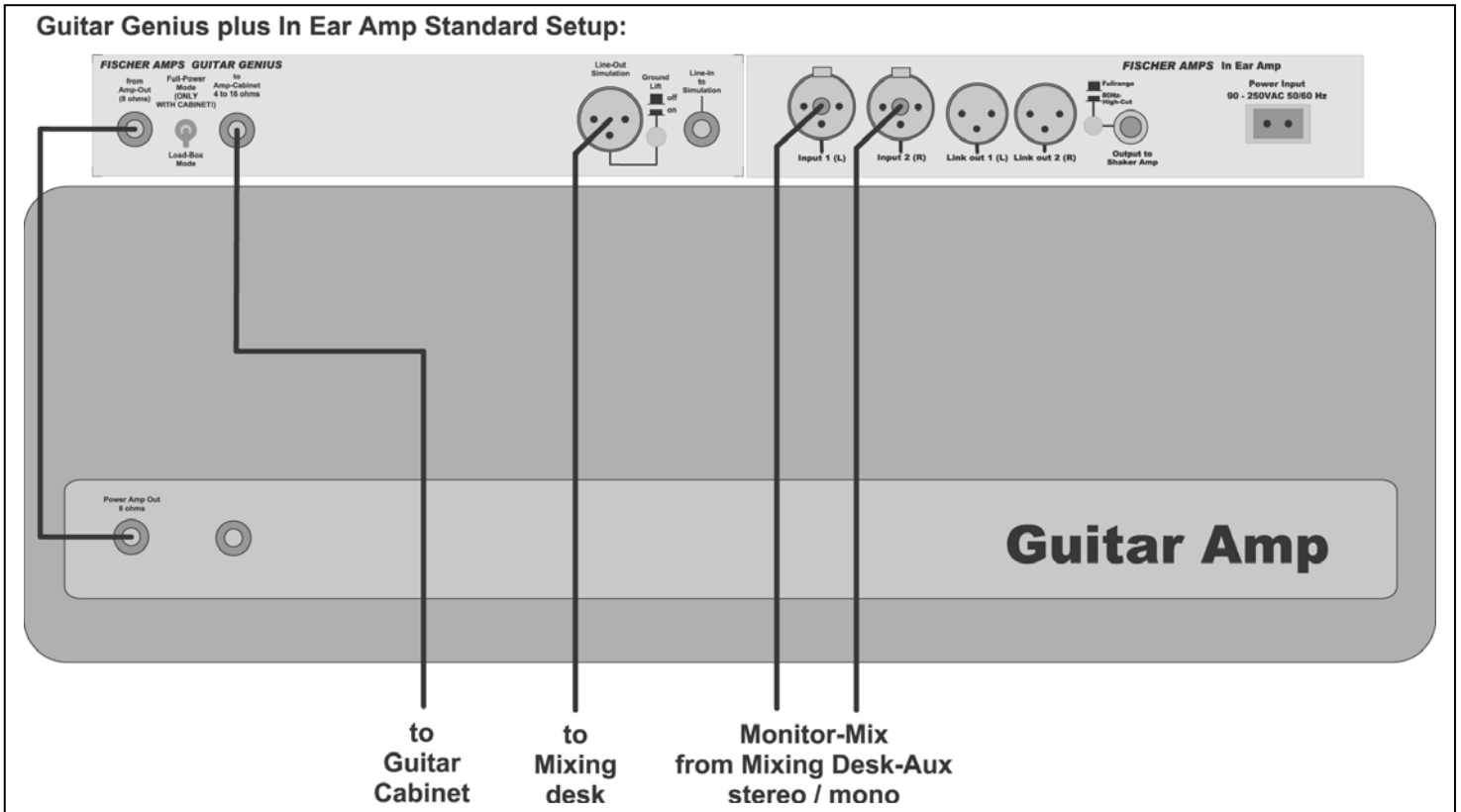
	<p>Disposal of used electrical and electronic devices (to be applied in European Union countries and other European countries with separate collection systems for these devices)</p> <p>The symbol on the product or its packaging indicates that this product must not be treated as normal domestic waste and must be handed over at a collection point for recycling electrical and electronic devices. You help protect the environment and the well-being of fellow human beings with your contribution to correct disposal. Incorrect disposal endangers our environment and our health. Material recycling helps reduce the consumption of raw materials. For further information on recycling this product, contact your local authority, community waste disposal operations or the shop where you bought this product.</p>
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Set-up suggestions:

Here are a few set-up suggestions for how you can best use the Guitar Genius, including suggestions for use in conjunction with the Fischer Amps In Ear Amp and the Guitar In Ear Cable.



Guitar Genius plus In Ear Amp / Practice-Setup:

