SPEAKER AMP PROTECTOR

Picture similar

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Dear customer,

Thank you for your purchase of a SCHNERZINGER product.

Please take the time to precisely read the information in this guide. You will find important instructions to use your product and hints for the optimal integration into your Hi-Fi system.

This guide facilitates your use of the product, promotes understanding its functional characteristics and helps you to obtain the full efficiency of the product.

We hope you enjoy your new SCHNERZINGER product.

Please clean the product with a non-scratching dry duster only. Avoid using cleaning agents.

A potting compound in the devices protects the innovative GIGA CANCELLING technology with its particular electrical components specially manufactured for SCHNERZINGER against direct access and screening via X-ray or magnetic field applications. A slight rustling caused by this potting compound is normal and does not result in any functional impairment. There are no informed crystals in the devices.

In case of malfunctions contact your SCHNERZINGER dealer. Please do not attempt to service the device yourself or to open it, in that case you will lose your entitlement for our manufacturer warranty.

In the case of damages at the power plug or power cable please initiate an exchange at SCHNERZINGER via your dealer.

Package Contents

SPEAKER AMP PROTECTOR
CONTROL UNIT (COUA)
12V Power Supply, cable length 1,5m
3,5mm jack extension cable 5m
Antenna
SAP INTERFACE set (2 pieces)

Contents

PROTECTOR SYSTEM

The music reproduction quality of an audio system is highly affected by low and high frequency electrical interfering fields, caused by Wi-Fi, cellular radio, power lines etc. With the **PROTECTORS** and their integrated trendsetting **GIGA CANCELLING** technology, SCHNERZINGER has developed a product category that actively eliminates the sonic effects of low and high frequency interfering fields.

The PROTECTORS significantly enhance the transmission quality of audio systems. The sonic effects include an astonishingly higher spatial depth and resolution as well as increased broad and fine dynamics in music reproduction.

Utilizing the operating principle and efficiency of the GIGA CANCELLING technology, the SCHNERZINGER PROTECTORS represent a unique solution in the market.

An important health aspect: PROTECTOR technology does not increase radiation exposure within the room.

SPEAKER AMP PROTECTOR

Via the **SAP-INTERFACES** the **SPEAKER AMP PROTECTOR** will be hooked up to the speaker terminal at the speakers or the amplifier.

Utilizing GIGA CANCELLING technology it protects the sensitive components of the speaker crossover, the power amplifier and the speaker cable from losing sound quality due to electrical interfering fields. Whereas conventional filters and conditioners merely attempt to stave off the interfering fields of hi-fi equipment intruding from the outside, the SPEAKER AMP PROTECTOR actively operates right in the equipment, in the immediate vicinity of the signal-transmitting components

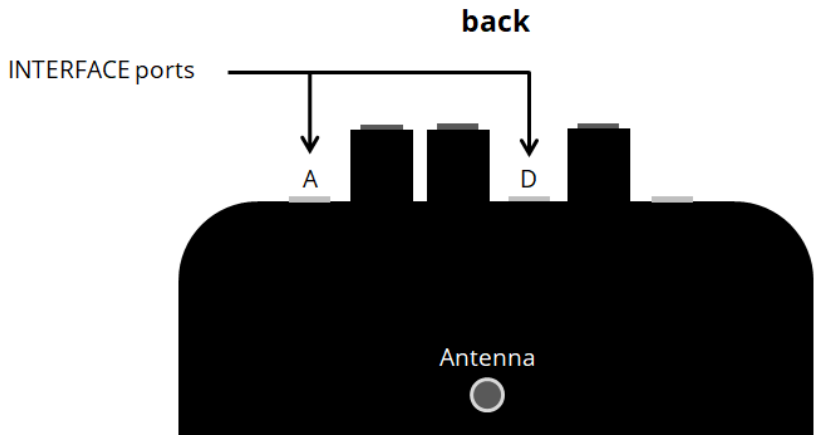
The SPEAKER AMP PROTECTOR can be easily integrated into any environment, while personal listening preferences may also be considered.

Connecting the SPEAKER AMP PROTECTOR to amplifier resp. speaker

The outputs of the amplifier or the inputs of the speakers are available for the connection to the **SPEAKER AMP PROTECTOR** – please test the optimal connection.

Via the **SAP-INTERFACES** the SPEAKER AMP PROTECTOR ports A and D will be hooked up to amplifier or speakers.

To avoid the risk of damage, the amplifier should be switched off during installation.



From a variety of possible connectivity options for the **SAP-INTERFACES** two variants turned out to show the best results mostly:

1. Positive poles at the amplifier
   - INTERFACE 1: SAP port A to positive pole of the right speaker terminal at the amplifier.
   - INTERFACE 2: SAP port D to positive pole of the left speaker terminal at the amplifier.
2. Positive poles at the speakers
   - INTERFACE 1: SAP port A to positive pole of the terminal at the right speaker.
   - INTERFACE 2: SAP port D to positive pole of the terminal at the left speaker.

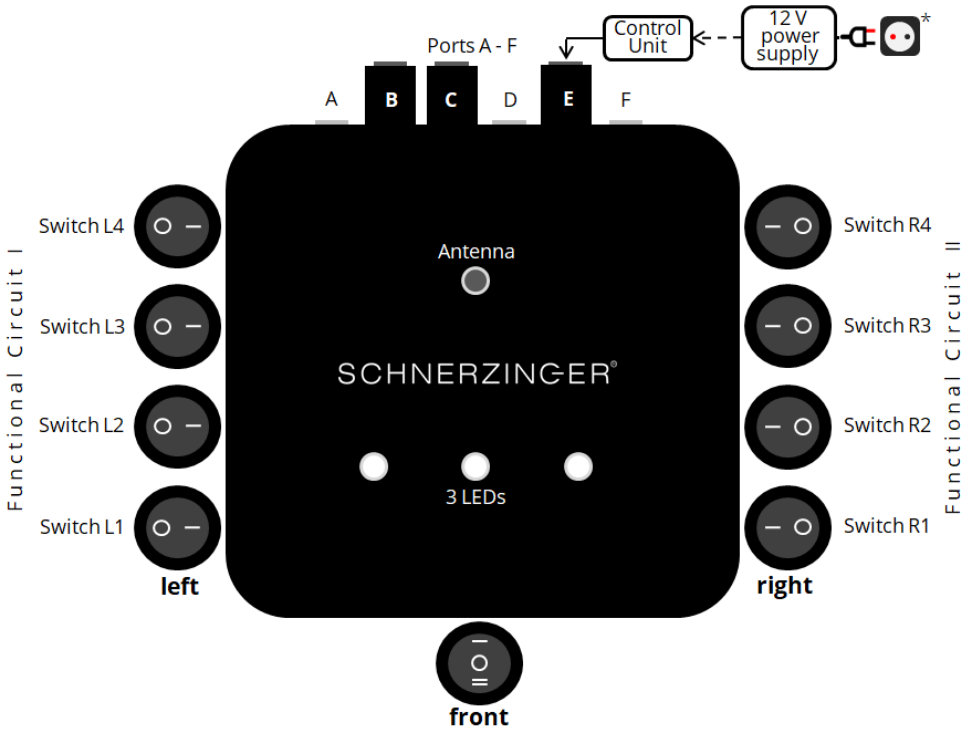
Setting up the SPEAKER AMP PROTECTOR

The **SPEAKER AMP PROTECTOR** has three power levels and two functional circuits to simply adjust bandwidth and clock rate of GIGA CANCELLING technology via toggle switches. This makes it possible to adapt to any interference field spectrum. The change in bandwidth extends or decreases the detection range, changing the clock rate the processing speed.

The rule is: the narrower the bandwidth, the higher the efficiency - the smaller the detection range. The lower the clock rate, the higher the extinction rate - the less interference frequencies are detected.

Changes need some time to take effect mostly. Therefore at each of the following steps you should wait for app. two minutes before judging.

Do not change the results as determined from the previous steps when you do the subsequent steps.



1. Step: Base setting

Usually (power level 1), the SPEAKER AMP PROTECTOR will be operated without the 12V power supply. To maintain its performance, it should be connected to the grid with CONTROL UNIT and 12V power supply once a year for 15 minutes.

Connect antenna (upright position) and **CONTROL UNIT** (COUA) to the SPEAKER AMP PROTECTOR, without 12V power supply.

Ports B, C and F are reserved for PROFESSIONAL LINE accessories. The optional SPEAKER AMP PROTECTOR BOOSTER will be connected to port F.

Set all 9 switches to base setting 0.

2. Step: Connecting to amplifier resp. speaker

See separate page 4

3. Step: Switch in front in position 0 - power level 1

Start with switch setting 0 = power level 1 – with CONTROL UNIT, **without** 12V power supply.

Setting up the SPEAKER AMP PROTECTOR

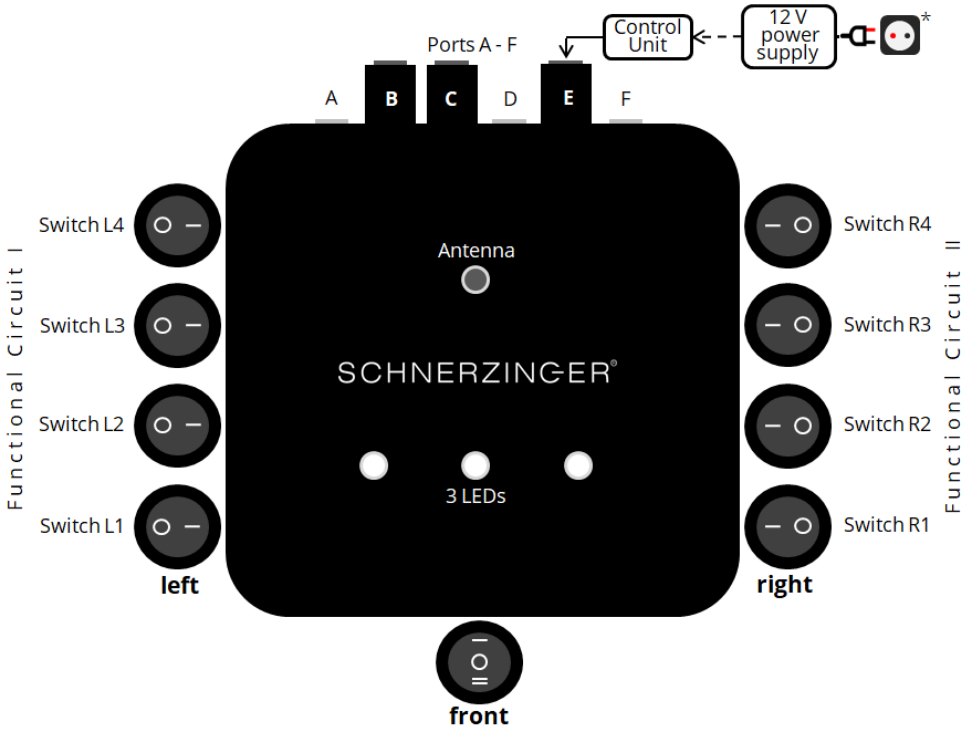
4. Step:

Switches left and right to be set in parallel:

Functional circuit I – **bandwidth port A**

Functional circuit II – **bandwidth port D**

Switches: L1+R1 = narrow to L4+R4 = wide



Starting from the base setting the switches L1+R1 - L4+R4 will be set sequentially from position 0 to position 1. Each step will increase the bandwidth.

If the bandwidth is to low, the best possible effect will not be reached yet. If the bandwidth is to high, even a sound degradation may occur.

The test ends, when the subsequent step won't achieve a better result.

5. Step: Switch in front – adjustment of the power level:

If power level 1 is not sufficient for the present interference field spectrum, 2 additional power levels can be activated. This requires the permanent connection of the 12V power supply* to the CONTROL UNIT and the grid. The 12 Volt power supply should be connected to a power circuit separate from the Hi-Fi system – ideally even to a different power phase.

Do not change the previously tested switch setting of the functional circuits I and II!

Activate power levels 2 and 3 with the front switch. Check the result compared to switch position 0 (**without 12V power supply**). If the result improves with power level 2 or 3, it is recommended to repeat step 4 with the best power level.

0 = Power Level 1 – with COUA, **without 12V power supply**
1 = Power Level 2 – with COUA, **with 12V power supply**, LEDs on
2 = Power Level 3 – with COUA, **with 12V power supply**, LEDs high

* note the correct phase (marked with a silver dot) – measure the phase of your socket.

Lasting Effect of the SPEAKER AMP PROTECTOR

The **SPEAKER AMP PROTECTOR** constantly operates to clear up interfering fields effectively and comprehensively.

If after a while you once want to hear the performance of your system without your SPEAKER AMP PROTECTOR, the buffering effect absolutely has to be considered.

If the SPEAKER AMP PROTECTOR is switched off for a short time only, it still takes effect because of the buffering of the power supply unit.

Disconnect the 12V power supply (if connected) and the CONTROL UNIT from the power grid and the SPEAKER AMP PROTECTOR resp. Detach all port connections, especially the **SAP-INTERFACES**. Additionally remove the antenna, place the unit on the floor and set the switch in front to position 2. Keep these conditions for several hours, preferably overnight. This way you achieve that the SPEAKER AMP PROTECTOR has no effect any more.

Upon recommissioning the interfering fields will be cleared again fast.

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