



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 HiFi 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 nonscratching dry duster only. Avoid using cleaning agents.

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.

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^{*} Not for ESSENTIAL LINE

^{**} Only for TS LINE

^{***} Only for RESOLUTION LINE

Connecting SCHNERZINGER CABLE

To avoid the risk of damage, the particular HiFi components should be switched off during installation of the cables.

Thanks to **ATOMIC BONDING-**formatted conductor material all SCHNERZINGER cables transmit even the highest current pulse peaks at full speed. In addition, each SCHNERZINGER cable forms a **bidirectional barrier** when used in conjunction with a **CABLE PROTECTOR**:

- external interfering fields radiating from the power grid or the cables are blocked
- internal electrical interfering fields caused by the HiFi devices themselves are not transferred to other HiFi devices but dissipated outwards.

Each SCHNERZINGER product can be used on its own. But using SCHNERZINGER products throughout will result in a closed system in which the bidirectional effect remains uninterrupted.



The logo **SCHNERZINGER** is written in the **direction of signal flow** and conductor formatting on the cables. Please connect the cables accordingly.

With **stereo** cables the logo is written in red on the right cable (right channel) and in black on the left cable (left channel). At RCA cables the color of the ground connection is red for the right cable and white for the left cable.

With **speaker** cables the end with the SCHNERZINGER logo written in red will be connected to the positive pole (red terminal) resp. the end with the SCHNERZINGER logo written in black to the negative pole (black terminal).

The related cable end pairs are respectively marked with small shrink tubing (black and white). These are either used separately for bi-wiring or merged at the terminal to enlarge the connecting surface area.



For break-in SCHNERZINGER cables should play normal music, special burn in – CDs offer no advantage. Minimum break-in time 50 hours, further improvements may be achieved well after 100 – 200 hours.

CABLE ports

SCHNERZINGER cables offer additional ports – located at the front end of the cable (in the direction of signal flow):

CC1: port for **CABLE PROTECTOR** and/or **CABLE HARMONY PLUG** diagnose port, port for **SIGNAL PROTECTOR RESOLUTION**

(only for interconnects and digital cables)

The accessories should be used step by step, starting with the major SCHNERZINGER source cable and further on in the direction of signal flow.





CABLE HARMONY PLUG

Since October 2018 the TS-series offers the plug-in module **CABLE HARMONY PLUG** (except for DIGITAL and PHONO cables).

It is part of the standard delivery of the cable. Thus listening preferences may be considered. **The taste of the listener decides about the use.**

Earlier cable generations may be retrofitted. Please ask your SCHNERZINGER dealer.

BIDIRECTIONAL CABLE PROTECTION

The **CABLE PROTECTOR** is an amplifier of the SCHNERZINGER BIDIRECTIONAL technology, which protects the signal conductor from electrical interference and in addition prevents the transmission of interfering fields between the devices.

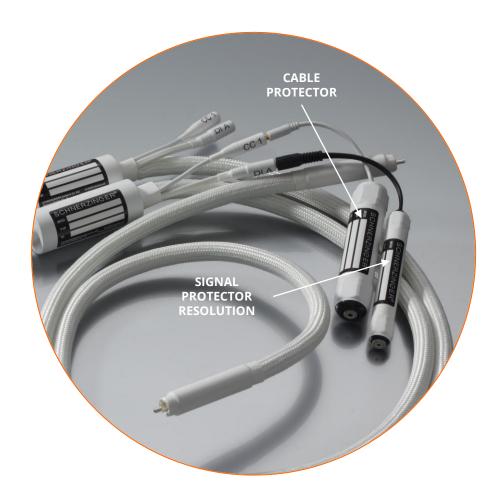
Its use makes sense with massive electrical interfering fields.

If the CABLE PROTECTOR and the optional CABLE HARMONY PLUG are used in the TS series, the CABLE PROTECTOR is connected to CC1 and the CABLE HARMONY PLUG to the CABLE PROTECTOR.

A CABLE PROTECTOR stereo-set is designed for a RCA, XLR or SPEAKER cable pair. In any case both channels have to be used, the left channel as well as the right channel.



A single unit of a CABLE PROTECTOR stereo-set may in no case be used as a CABLE PROTECTOR mono e. g. for a POWER CORD or a DIGITAL CABLE. This may result in overload damages.



SIGNAL PROTECTOR RESOLUTION

Exclusively for the RESOLUTION LINE, SCHNERZINGER offers the optional **SIGNAL PROTECTOR RESOLUTION** for connection via DIA, an effective power amplifier for the effect of draining the inner interfering fields that have penetrated the signal path to the outside.

PHONO CABLE

Due to the low signal currents, PHONO cables are particularly sensitive to interference and the degree of shielding. Insufficient shielding protects the signal too little, which is noticeable in a humming noise, while too strong shielding causes sonic drawbacks.

Therefore SCHNERZINGER PHONO cables offer an adaptable shield.

For this purpose there are 1-3 strands on the transmitter side (source) and on the receiver side, depending on the model, which are marked with the numbers 1 to 3. The procedure for the sound-optimized adaptation of the shielding takes place step by step. Once the desired result is achieved, the appropriate configuration is retained. In particular, the hum behavior is observed.

- 1. Connection of strand 1 on the receiver side to the ground of the preamplifier.
- 2. Additional connection of strand 2 on the receiver side (if available).
- 3. Additional connection of strand 2 on the receiver side (if available).
- 4. If none of the options 1-3 achieve the desired result, disconnect all strands and only connect strand 3 on the receiver side (if available).
- 5. Additional connection of strand 2 on the receiver side (if available).
- 6. Additional connection of strand 1 on the receiver side.
- 7. If none of the options 1-6 achieve the desired result, disconnect all the strands and then connect both strand 1 on the transmitter side to the ground of the turntable and strand 1 on the receiver side to the ground of the preamplifier.
- 8. In addition, connect strand 2 on the transmitter side to the ground of the turntable and strand 2 on the receiver side to the ground of the preamplifier (if available).
- 9. In addition, connect strand 3 on the transmitter side to the ground of the turntable and strand 3 on the receiver side to the ground of the preamplifier (if available).

Phase assignment of the POWER CORDS

Power connection

The conductor of the SCHNERZINGER POWER CORDS has a formatting direction. Current should not flow against this conductor formatting direction, thus it must be ensured that the Schuko-plug will be inserted into the socket correctly.

A silver dot on the power plug shows the correct phase. For proper connection measure the phase of your socket.

Connecting the HiFi devices

Each HiFi device has a preferred phase assignment. You may find it in its manual, measure it, or ask the manufacturer.

The phase assignment typically complies with the standard of the German Standardization Organization (DIN).

But some manufacturers chose to derivate from this standard.

Accordingly SCHNERZINGER offers its POWER CORDS in two versions:

- PCLC (phase left at the IEC device plug as per DIN see figure on the right)
- PCRC (phase right at the IEC device plug)



With SCHNERZINGER POWER CORDS it's **no option to correct the phase at the device by turning the Schuko-plug in the socket**. Current would work against the conductor formatting direction then.

POWER CORD quality grades

For SCHNERZINGER POWER CORDs of different quality grades, the following allocation is usually recommended: the best quality grade for the power amplifier, then digital devices and finally analogue devices.

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