

Powered Studio Monitoring Subwoofer

SW10K eXperience

User's Guide





CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARISED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

NOTE: Some **ESI** products are equipped with dual or multi-voltage transformers (which is indicated on the back panel). Before you plug in the power cord, please check the AC voltage selector on the back panel of this product and make sure the voltage selector is set correctly.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to person



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION: The apparatus shall not be exposed to dropping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

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www.esi-audio.com

1. Introduction

Congratulations on your purchase of the ESI SW10K eXperience.

A subwoofer is an essential ingredient for many monitoring setups. Although many studio monitors such as our nEar04, nEar06, nEar05 eXperience or nEar08 eXperience provide sufficient bass frequency response, adding a SW10K eXperience subwoofer will help you to provide a better picture of the low frequencies in your mix. Whether you are producing classical 2.1 sound or 5.1 / 7.1 surround sound productions, SW10K eXperience will easily become an important part of your monitoring setup.

2. Basics & Installation

For optimal performance of SW10K eXperience, read the instructions in this manual thoroughly and carefully before you are using the speakers.

Unpacking / Handling

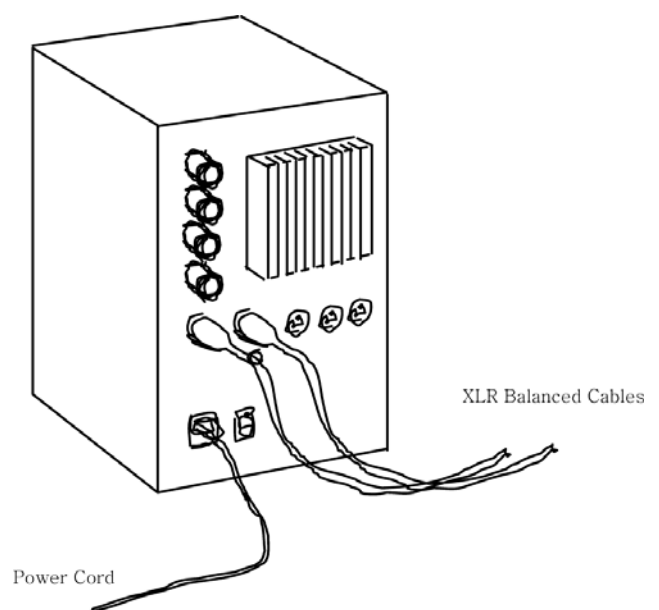
To remove the monitor from the carton its best to turn the package carefully upside down on the floor or on a table and then lift the carton vertically up slowly to leave the monitors resting in the packaging foam. Make sure that you don't grab the speaker driver unit on the front to avoid damage. Now check the monitor for signs of damage that might have occurred in shipping. In the unlikely event of this, please contact the reseller of the product immediately. Be careful when you remove the packaging foam. Please keep all packing materials.

Connection

High quality balanced or unbalanced audio cables are recommended for input connection. The monitors typically connect to the line level output of a mixing console, to a computer audio card or a professional bass management amplifier. Make sure the power of the monitor is switched off before you connect any audio cables. Also turn down the volume initially.

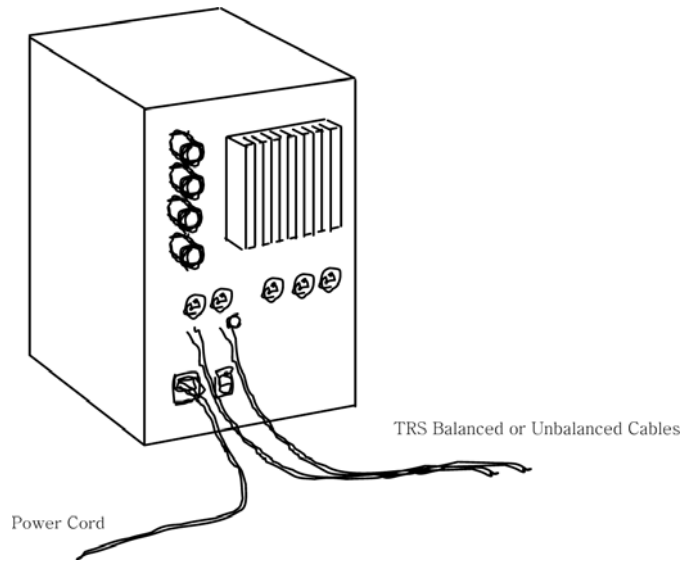
XLR balanced connection

Connect male side of XLR balanced cables to the balanced inputs of SW10K eXperience – as show on the picture on the right. Make sure the power cable is connected as well.



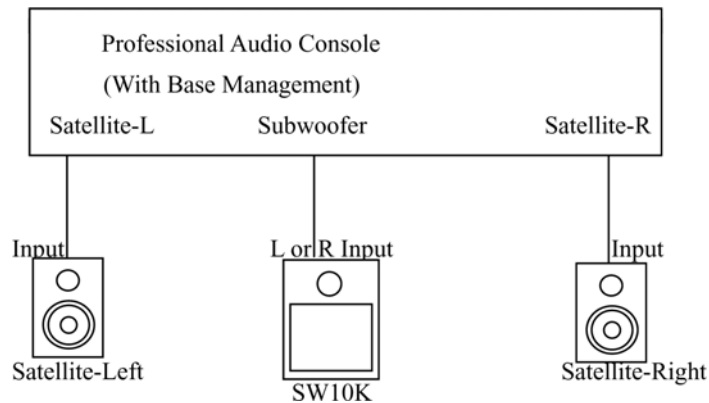
TRS balanced / unbalanced connection

Connect male side of TRS balanced or unbalanced cable to the TRS inputs of SW10K eXperience – as show on the picture on the right. Make sure the power cable is connected as well.

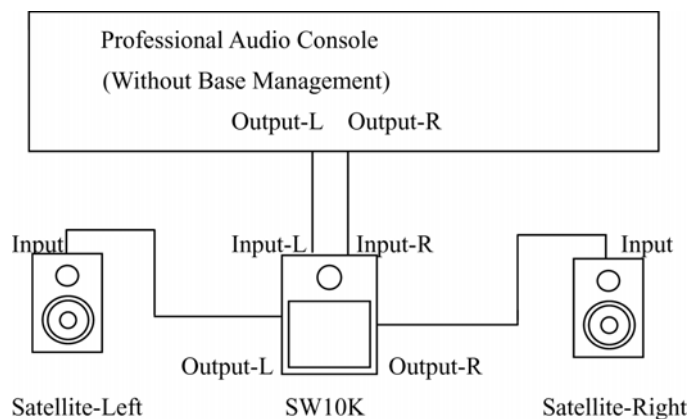


Satellite speaker connection

If your source device has its own base management, you would typically connect the satellite speakers directly to them rather than to SW10K eXperience. This is the standard procedure if you connect SW10K eXperience and your satellites to any surround capable amplifier with separate outputs. Refer to the following diagram for a 2.1 setup:



In a 5.1 or a 7.1 setup, the other surround speakers will also be connected to the source directly although the diagram does not show that. If your source device is only stereo and / or does not have its own base management, the satellites are connected to the outputs on the right side of the back panel of SW10K eXperience using balanced XLR cables. Refer to the following diagram:



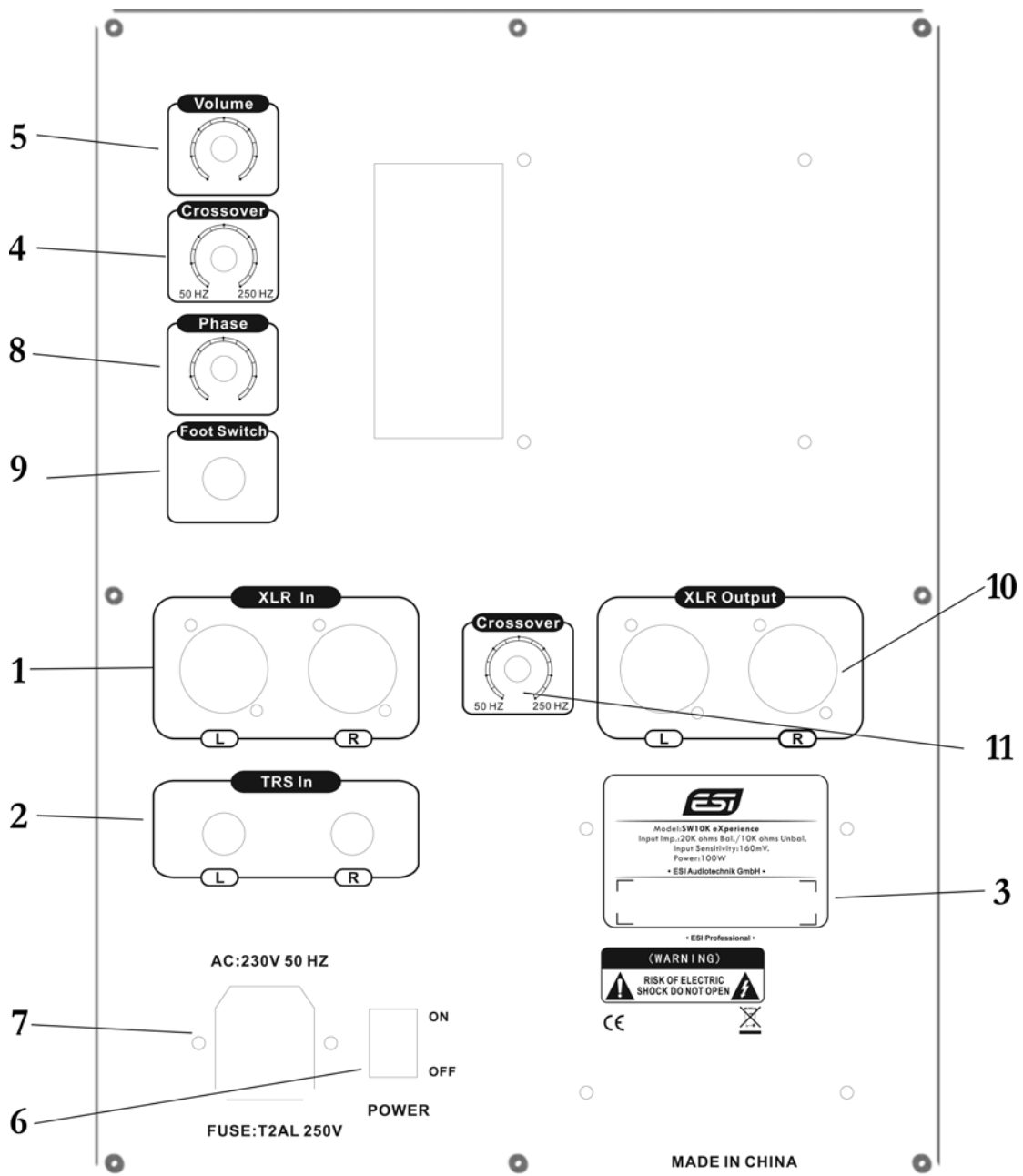
Comments

Please make sure to not place any obstacles that may block the flow of air or that could generate sound reflections (especially highly reflective material including glass or metal) in front of the speakers. Also, don't put plants in pots on top or too close to your monitoring speakers.

3. Technical Data

Please note that technical specifications are subject to change without any prior notice. The specs given in this manual are up-to-date at the time of the creation of this document.

Rear Panel



1. XLR inputs – these connectors accept balanced XLR input connections. The XLR input is wired like this:

| INPUT SIGNAL | XLR CONNECTIONS |
|--------------|-----------------|
| + | PIN 2 |
| - | PIN 3 |
| Shield | PIN 1 |

2. TRS inputs – these jacks accept TRS input connections, either balanced or unbalanced. For balanced connections, a 3-conductor TRS plug is necessary. The TRS input is wired like this:

| INPUT SIGNAL | TRS CONNECTIONS |
|--------------|-----------------|
| + | Tip |
| - | Ring |
| Shield | Sleeve |

Unbalanced wiring works with either a 2- or 3-conductor TRS connector. A 2-conductor TRS plug (or sometimes also just called TS plug) automatically grounds the minus signal input, whereas a 3-conductor TRS plug wired unbalanced provides the option of leaving the minus open or grounded. We recommend that you ground the unused input.

3. bar code label – this label contains the product serial number bar code.

4. subwoofer crossover control – this controls a 2nd order (12dB/octave) low-pass filter with upper limit between 50Hz and 250Hz. You can adjust the crossover frequency for the actual SW10K eXperience subwoofer output here. If you are not using any satellites connected to SW10K directly, set this to 250Hz. Don't confuse this with the satellite crossover control (11).

5. volume control knob – use the volume control knob to set the proper input level from the sound source.

6. power switch – when you push the power switch, SW10K eXperience will be turned on, and –surprise– it will be turned off when you push the power switch again.

7. power port with ext. fuse – use this connector to plug in the detachable 3-circuit line cord that connects to the power outlet.

8. phase control – the purpose of this control is to match the phase of the satellite cut off frequency to the phase of the upper frequency limit of the subwoofer. Adjust the phase control for maximum sound pressure at cross over frequency in order to make sure that the subwoofer and satellites are in phase at cross over frequency. This allows you to get the maximum sound pressure and most accurate sound quality after setup.

9. foot switch connector – this connector allows you to connect a foot switch that you can use to mute the subwoofer sound. This is helpful if you want to make A/B comparison of the sound with and without subwoofer and you can quickly control it with a simple pedal.

10. XLR outputs – these connectors provide a balanced XLR signal for left and right channel. If you are not using an amplifier with its own bass management, you will need to connect your satellite speakers to these outputs accordingly.

11. satellite crossover control – this allows you to adjust the crossover frequency for the output to the satellites connected to SW10K eXperience via the XLR outputs (10). Don't confuse this with the subwoofer crossover control (4).

4. General Information

Trademarks

ESI, nEar, SW10K and SW10K eXperience are trademarks of EGOSYS, Inc. and ESI Audiotechnik GmbH. Other product and brand names are trademarks or registered trademarks of their respective companies.

Correspondence

For technical support inquiries, contact your nearest dealer, local distributor or ESI support online at www.esi-audio.com.

Disclaimer

All features and specifications subject to change without notice.

Parts of this manual are continually being updated. Please check our web site www.esi-audio.com occasionally for the most recent update information.

Declaration of Conformity (for the European Union)

The product described in this manual is manufactured in China by **ESI Audiotechnik GmbH, Brennerstraße 48, D-71229 Leonberg, Germany**. The product is labelled with the CE mark and conform to the protection requirements of the European Electromagnetic Compatibility Standards and Directives. The product is designed and constructed such that electromagnetic disturbances generated do not exceed levels allowing radio and telecommunications equipment and other equipment to operate as intended, and, the product has an adequate level of intrinsic immunity to electromagnetic disturbance to enable operation as specified and intended.

The product is marketed as **ESI SW10K eXperience** studio monitoring speaker.

With reference to regulations in the directives 73/23/EEC, 89/336/EEC, the equipment listed above is covered by this certificate and labelled with the CE mark conforms to the following standards:

| | |
|-----------------------|---|
| EN60065 | Safety requirements for mains operated electronic and related apparatus for household and similar general use. |
| EN55103-1 & EN55103-2 | Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. |


This declaration is made by Claus Riethmüller (Managing Director).

Leonberg, Germany

City

22.12.2008

Date


Signature

SAFETY INSTRUCTION

1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the appliance is operated.

2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

3. HEED WARNINGS

All warnings on the appliance and in the operating instructions should be adhered to.

4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

5. WATER AND MOISTURE

The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6. CART AND STAND

The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stop, excessive force, and uneven surface may cause the appliance and cart combination to overturn.



7. WALL OR CEILING MOUNTING

This equipment is not designed for use mounted on a wall or a ceiling.

8. VENTILATION

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. HEAT

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. POWER SOURCES

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. POWER – CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exist from the appliance.

12. CLEANING

The appliance should be cleaned only as recommended by the manufacturer.

13. NON USE PERIODS

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

14. OBJECT AND LIQUID ENTRY

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

15. SERVICING

The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

16. DAMAGE REQUIRING SERVICE

The appliance should be serviced by qualified service personnel when:

- a) The power-supply cord or the plug has been damaged; or
- b) Objects have fallen, or liquid has been spilled into the appliance; or
- c) The appliance has been exposed to rain; or
- d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- e) The appliance has been dropped, or the enclosure is damaged.

17. POWER LINES

(APPLIES FOR TUNER AND RECEIVERS ONLY)

An outdoor antenna should be located away from power lines.