

Powered 10" Studio
Monitoring Subwoofer

aktiv 10s

User's Guide



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1. Introduction

Congratulations on your purchase of the ESI aktiv 10s.

A subwoofer is an essential ingredient for many monitoring setups. Although many studio monitors like our aktiv, nEar and uniK series provide sufficient bass frequency response for many applications, adding a aktiv 10s 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, aktiv 10s will easily become an important part of your monitoring setup.

2. Basics & Installation

For optimal performance of aktiv 10s, 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 (the *Level* potentiometer).

XLR balanced connection

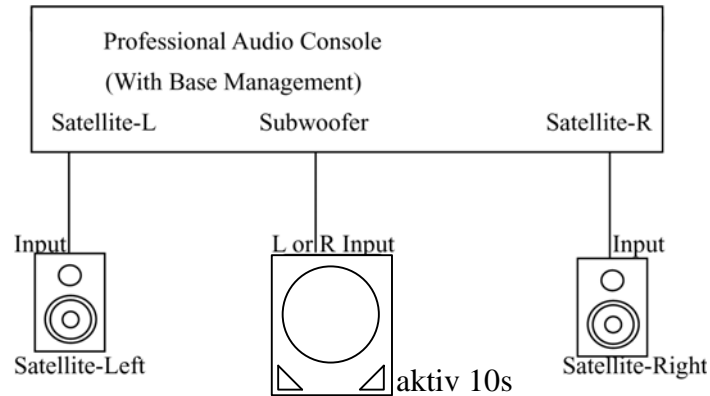
Connect male side of XLR balanced cables to the balanced inputs of aktiv 10s (they are labelled *Input L* and *Input R* on the left side of the rear panel). Make sure the power cable is connected as well.

TRS balanced / unbalanced connection

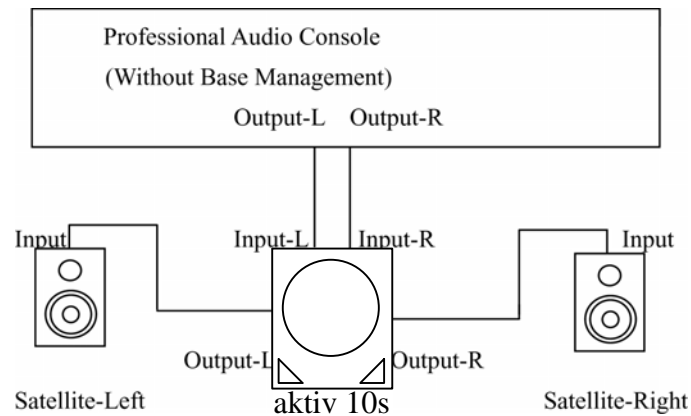
Alternatively connect a TRS balanced or unbalanced cable to the TRS inputs of aktiv 10s (labelled *Input L* and *Input R* on the left side of the rear panel). Make sure the power cable is connected as well.

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 aktiv 10s. This is the standard procedure if you connect aktiv 10s 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 aktiv 10s 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 speaker. Also, don't put plants in pots on top or too close to your monitoring speakers.

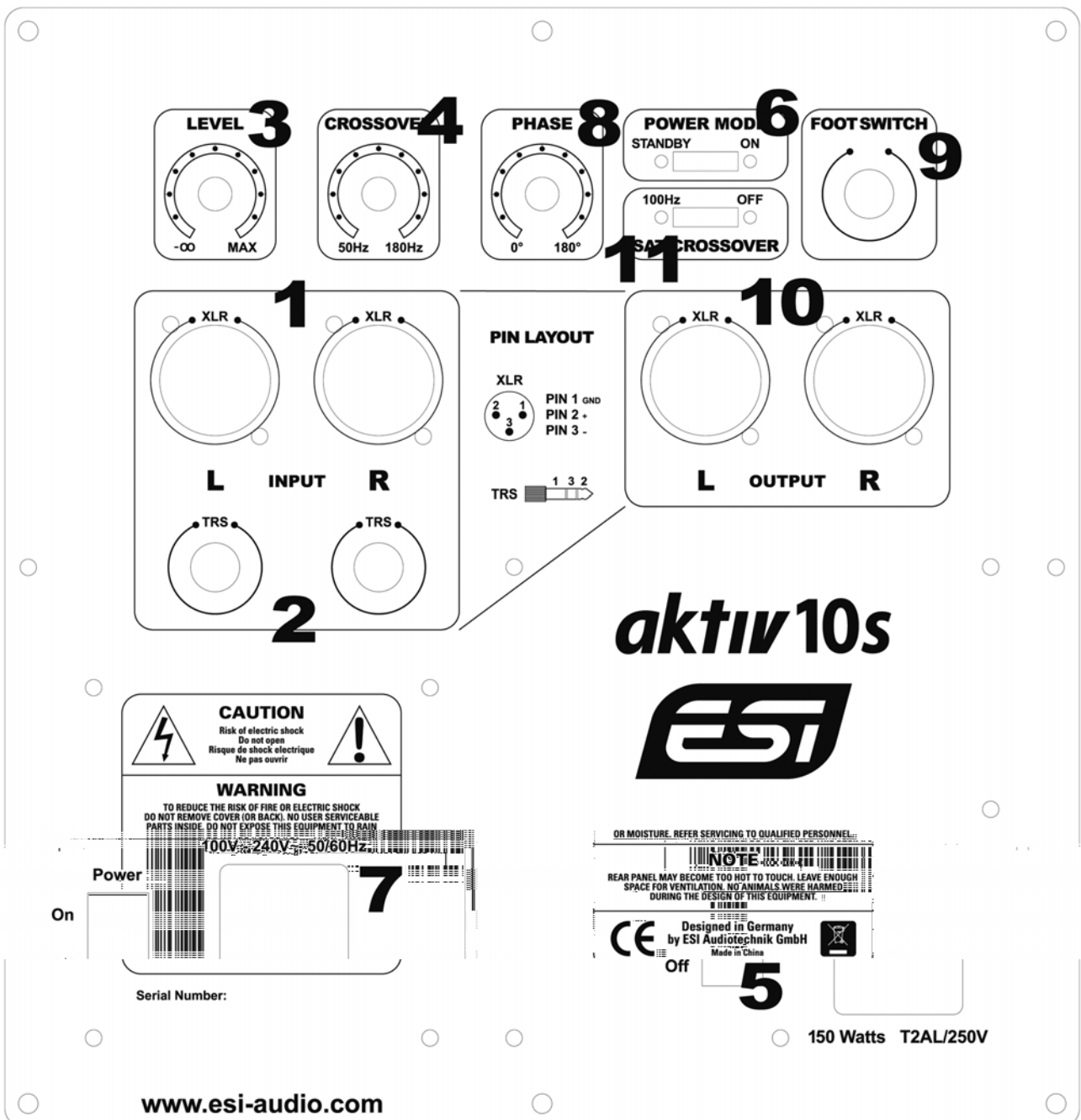
3. Technical Data

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

- 10" bass reflex powered subwoofer
- amplifier power: 150W@100Hz, 4 Ohm, 0.1% THD
- subwoofer crossover frequency: 50Hz - 180Hz (adjustable)
- separate satellite output crossover frequency: @100Hz and flat (adjustable)
- phase control
- volume control (to adjust input level)

- power mode: standby and on
- inputs: balanced XLR, (un)balanced 1/4" TRS
- outputs: balanced XLR
- input impedance: 20kOhm balanced, 10kOhm unbalanced
- foot switch input as mute control
- dimensions: 340mm(H) x 340mm(W) x 340mm(D)
- weight: 14 kg

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. level control knob – use this level control knob to adjust to the input proper input level from the sound source.

4. subwoofer crossover control – this controls a low-pass filter with upper limit between 50Hz and 180Hz. You can adjust the crossover frequency for the actual aktiv 10s subwoofer output here. If you are not using any satellites connected to the subwoofer directly it is best to set this to 180Hz. Don't confuse this with the satellite crossover control (11).

5. power switch – when you push the power switch, aktiv 10s will be turned on, and –surprise– it will be turned off when you push the power switch again.

6. power mode stand by switch – this switch controls whether aktiv 10s is always on or works in a standby mode, which means that it goes into a low power mode when no audio signal is played.

7. power port with ext. fuse – use this connector to plug in the detachable 3-circuit line cord that connects to the power outlet. The connector has a T2AL/250V fuse inside.

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 using balanced XLR cables.

11. satellite crossover control – this allows you to adjust the crossover frequency for the output to the satellites connected to aktiv 10s via the XLR outputs (10). You can either disable the crossover frequency or you can set it to 100Hz. Don't confuse this with the subwoofer crossover control (4).

4. General Information

Trademarks

ESI, aktiv, nEar, uniK and aktiv 10s are trademarks of 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.

