

Top Quality 5" Active
Studio Reference Monitor

aktiv 05

User's Guide



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Revision 2, July 2012

www.esi-audio.com

INDEX

1. Introduction	4
2. Basics & Installation	4
Unpacking / Handling.....	4
Connection.....	4
3. Placement	5
Stereo / 2.0 Positioning.....	5
Stereo with Subwoofer / 2.1 Positioning.....	5
5.1 Positioning.....	6
7.1 Positioning.....	6
Orientation.....	7
Comments.....	7
4. Technical Data	7
Specifications.....	7
Rear Panel.....	8
5. General Information	9

1. Introduction

Congratulations on your purchase of the ESI aktiv 05.

The aktiv 05 top quality near field reference monitor has been developed especially for high level home studios and special project studios. They take 5" near field monitoring speakers to a new level, boasting an ultra-flat low frequency response and a top quality kevlar 5" driver delivering unparalleled punch in the low-mid frequency – a major improvement over the paper and polypropylene drivers used in most comparable products. ESI was the first vendor using kevlar for studio monitors in this price range as material inside the low frequency driver. Other vendors have since copied our idea, however there is much more to excellent sound: aktiv 05 also feature a German optimized version of ESI's cross over technology that is perfect to provide the best output signal and frequency response 100% matching the installed drivers and cabinet design. Of course aktiv 05 is magnetically shielded for desktop operation next to your other electronic equipment without interference.

2. Basics & Installation

For optimal performance of aktiv 05, read the instructions in this manual thoroughly and carefully before you are using the speaker. We tried to keep this manual short so that you are not losing much time to read through it completely.

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 monitor resting in the packaging foam. Make sure that you don't grab the speaker driver units 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 XLR balanced or TS unbalanced audio cables are recommended for input connection. The monitor typically connects to the line level output of a mixing console or to a computer audio card. 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 cable to the balanced XLR input of aktiv 05. Make sure the power cable is connected as well. Setup all speakers (i.e. left / right channels) with the same type of cable.

TS unbalanced connection

Connect male side of TS unbalanced cable to the input jack of aktiv 05. Make sure the power cable is connected as well. Setup all speakers (i.e. left / right channels) with the same type of cable.

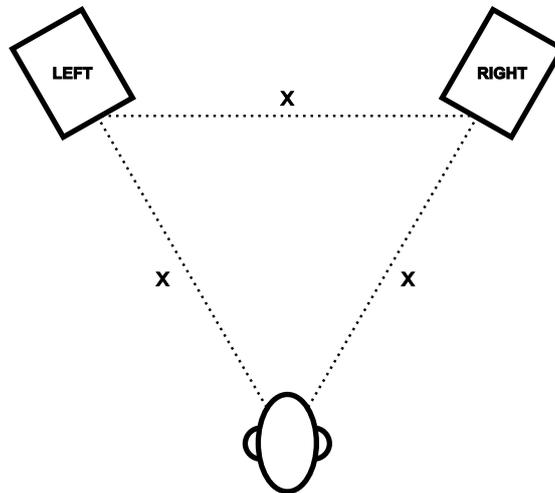
3. Placement

The placement of monitoring speakers is very critical and can compromise their performance. This is a general rule for every loudspeaker. To monitor with aktiv 05 utilizing their maximum capabilities, an appropriate listening environment and a correct placement are important.

Typically you would be using 2 units of aktiv 05 as one stereo pair – or more in surround setups (i.e. in a 5.1 setup you would use 5 units of aktiv 05 together with a subwoofer).

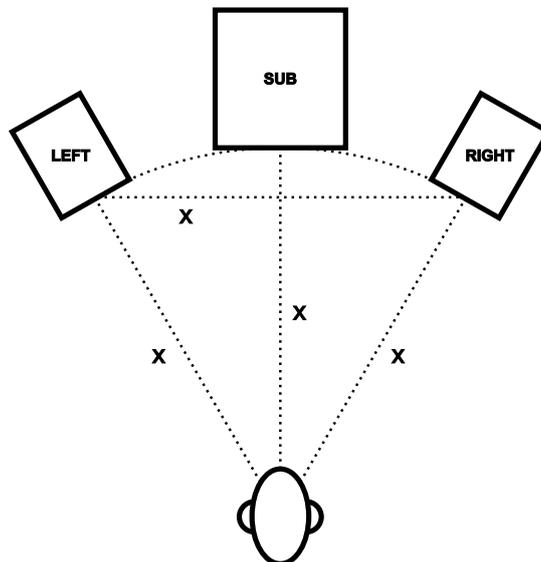
Stereo / 2.0 Positioning

Two units and the listener should be positioned or aligned in a regular triangle form. Please refer to the following diagram to understand how to position your monitors. Each distance x should be identical.



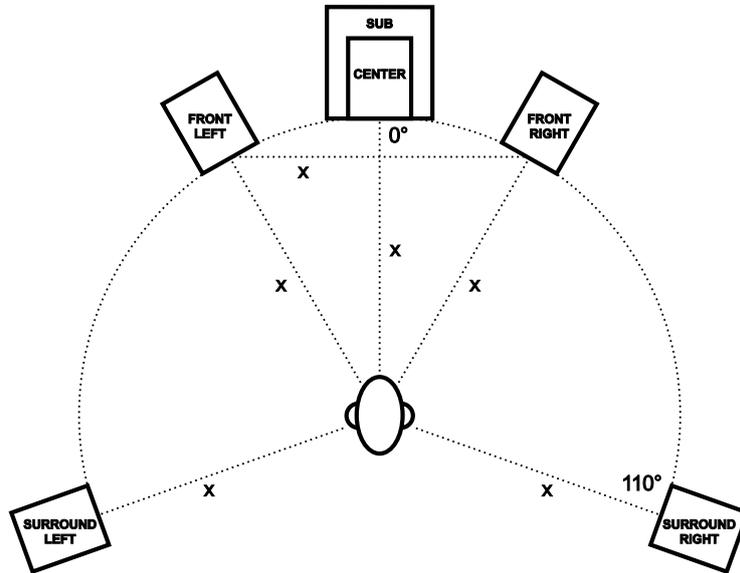
Stereo with Subwoofer / 2.1 Positioning

In a stereo setup with an added subwoofer, the subwoofer speaker should be positioned ideally in the exact middle in front of the listener (with the same distance x). If this is not possible, it should be as close to that position as possible.



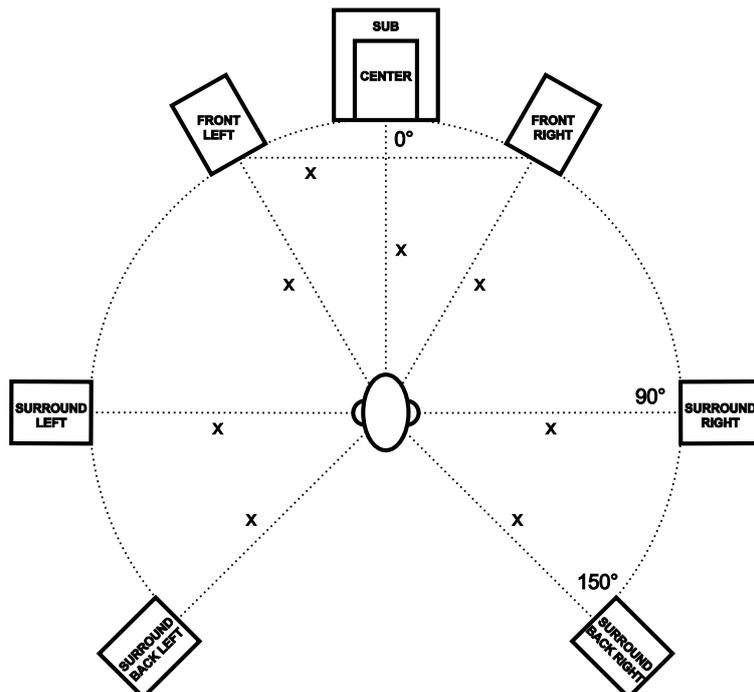
5.1 Positioning

In a 5.1 surround set, the center speaker should ideally be placed on top of the subwoofer. If this is not possible, the subwoofer can be moved to the left or right but should be as close as possible. The rear surround speakers should be positioned around 110° from the center speaker (all with the same distance x).



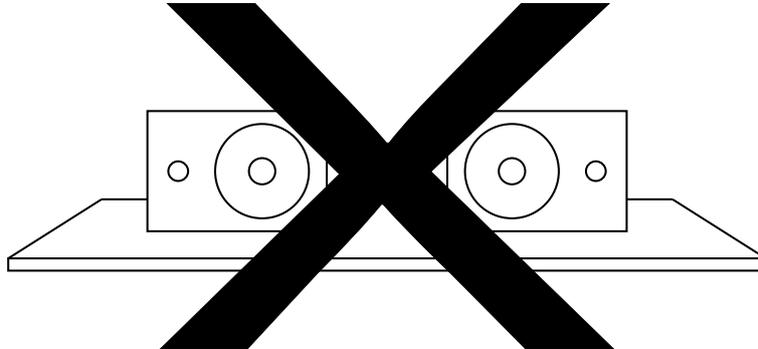
7.1 Positioning

In a 7.1 surround set, the center speaker should also ideally be placed on top of the subwoofer or as close as possible. The surround speakers are best placed 90° from the center speaker and the back surround speakers are best placed 135° to 150° from the center speaker. All speakers should be placed with the same distance x to the listener.



Orientation

It's very important to place the aktiv 05 vertically. Never place them horizontally.



Comments

Please also 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 monitor. Also, don't put plants in pots on top or too close to your monitors. Keep a certain distance to the wall behind the speaker, as it could block air flow.

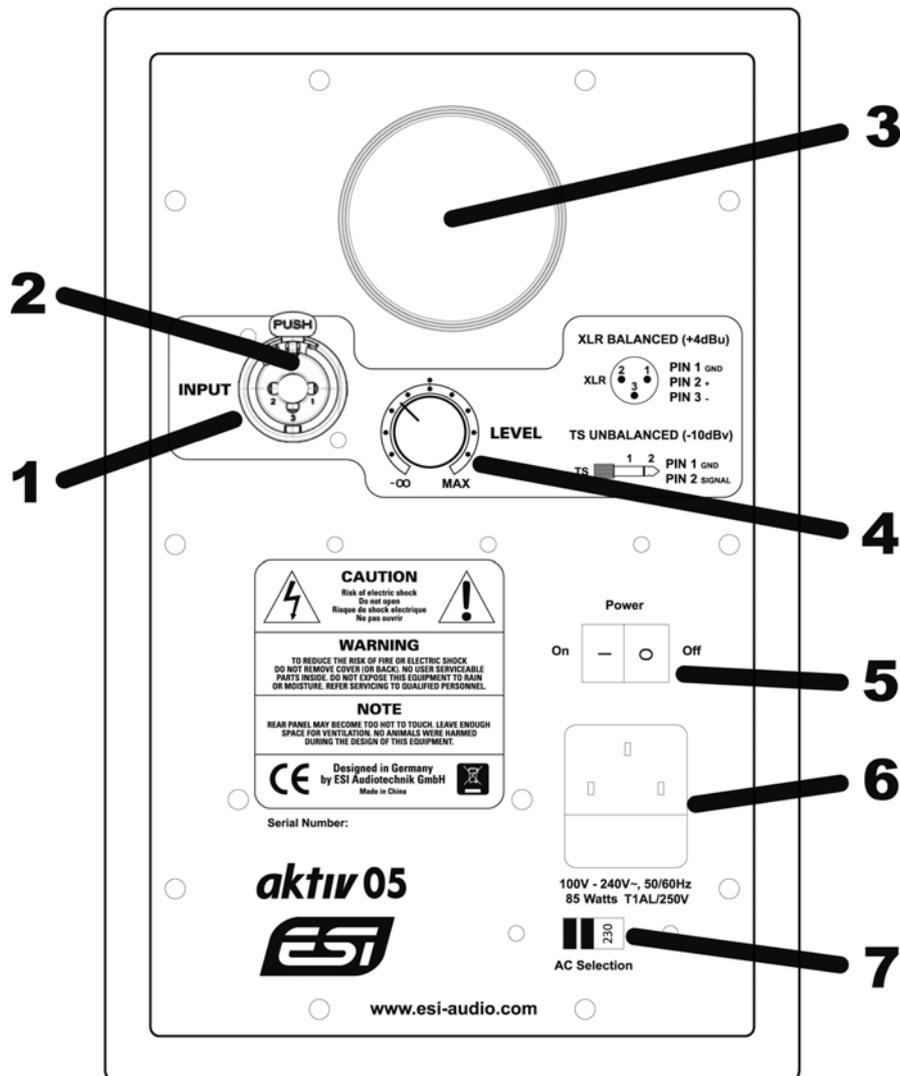
4. Technical Data

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.

Specifications

Model:	aktiv 05
Type:	2-way powered speaker
System Type:	Active Studio Monitor Speaker
Dimensions:	250mm (H) x 176mm (W) x 200mm (D)
Weight:	4.5kg
HF Driver:	1" silk dome tweeter
LF Driver:	5" kevlar curved cone (magnetic shielding type)
Output Power:	60W (HF 30W, LF 30W), 85W AC consumption power
Working Voltage:	AC100-240V 50/60Hz, with 115V / 230V AC selection switch
Frequency Response:	50 Hz – 20kHz
Input Impedance:	23.3 kOhm balanced, 13.3 kOhm unbalanced
Crossover Point:	2.5kHz
SPL:	88dB+/- 3dB
Rated Noise Power:	30 Watt (THD=1%, 4ohm@1kHz)
Input Sensitivity:	75mV@1Watt, 415mV@30Watt
Input Connectors:	XLR / TS1/4" combo connector, balanced / unbalanced input
Volume Control:	min - center - max
Indicator:	power LED on front panel, blue

Rear Panel



1. XLR input – this connector accepts balanced XLR input connections (optimised for +4dBu). XLR input is wired like this:

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

2. TS input – this jack accepts TS input connections, unbalanced (optimised for -10dBV). The TS input is wired like this:

INPUT SIGNAL	TRS CONNECTIONS
Signal	Tip
Shield	Sleeve

The TS input should not be used with balanced TRS signals. Although this is possible, the input level will not be correct in that case. For balanced connection, please use a XLR cable whenever possible.

3. vent port – aktiv 05 is a vented box speaker system with a vent port on the rear panel. Make sure you are not blocking the vent port (i.e. by putting the speaker too close to a wall) or the sound colour will be changed.

4. volume control knob – use the volume control knob to set the proper input level from the sound source. Make sure to setup all speakers accordingly. When set to the center position, the output level is set to the recommended calibrated level to reach the most optimised dynamic response (expecting a balanced XLR +4dBu or unbalanced TS -10dBV input signal).

5. power switch – when you push the power switch, aktiv 05 will be turned on, and –surprise– it will be turned off when you push the power switch again.

6. 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 contains a replaceable fuse (T1AL250V).

7. AC Selection – you can select either 115V or 230V AC power according to your local requirements. Make sure this is selected properly before you switch on aktiv 05 for the first time or your equipment could be damaged.

5. General Information

Trademarks

ESI, aktiv and aktiv 05 are trademarks of ESI Audiotechnik GmbH. Other product and brand names are trademarks or registered trademarks of their respective companies.

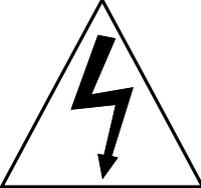
Correspondence

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.

	CAUTION Risk of electric shock Do not open Risque de shock électrique Ne pas ouvrir	
WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. REFER SERVICING TO QUALIFIED PERSONNEL.		
NOTE REAR PANEL MAY BECOME TOO HOT TO TOUCH. LEAVE ENOUGH SPACE FOR VENTILATION. NO ANIMALS WERE HARMED DURING THE DESIGN OF THIS EQUIPMENT.		
	Designed in Germany by ESI Audiotechnik GmbH Made in China	