



XTZ 93.21

Hi-Fi / Home Cinema - Monitor Speaker

User manual

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Introduction

Introduction

XTZ 93.21 offers a large amount of possibilities, so in order to utilize your new loudspeaker in the best way; you should carefully read through this manual. If you are unaccustomed, we will beg you to be patient, but if you have any questions, you are welcome to contact our free of charge support and we will help you out. See further information at the last page of this manual.



About 93.21

XTZ 93.21 is a bookshelf speaker that can be used either as a front speaker (on a stand for example) or a bookshelf speaker.

About XTZ

Philosophy

Our reference and starting point is to recreate a natural sound. We also respect the fact that acoustics always is a matter of taste.

XTZ Goals

To provide the optimal relation between price, performance and high quality.

Our concept:

- To produce the perfect compromise
- Large scale cost effective manufacturing
- The quality of our products is more important than the marketing
- Reduce the number of merchant middlemen.

Contact us

Web page: www.xtz.se
Email: info@xtz.se

Technical presentation

Cabinet design

The cabinet is constructed with a narrow baffle, an advantage in terms of sonic performance as it adds to the stability. This effectively reduces resonances.

The cabinet is made from 21 mm MDF which offers good sonic qualities and is in total ensures a very stable construction.

Tweeter driver

We have chosen a silk-made soft dome tweeter which provides superior transient response and a very flat frequency response without resonances.

Woofers/ mid range driver

For the woofer/midrange we decided to use a 6,5" solid coated driver with a smooth extended frequency response and a controlled roll off effect.

The driver is made from solid coated paper offering good sonic qualities, a high strength and low weight.

The surface treated cone is extremely light but still stiff and effectively reduces resonances.

The rubber surrounding helps suppressing edge resonances.

The metal basket is a "high flow" type that is shaped exactly due to the precise moulding process. This makes sure that the basket is very stable and efficiently reduces resonances. The basket is solid and stable.

A strong magnet combined with the light cone ensures a high efficiency and a good transient response.

Crossover / Binding post

We have chosen a -12 dB crossover with a fast transient response.

The gold plated connectors are single wired and offer the possibility to connect the amplifier using banana plugs, fork- or pure cable into the speaker terminal.

The tweeter is adjustable in 2 levels

For further information: **Sound settings**

Preparations

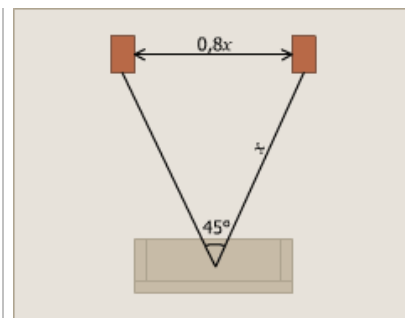
Unpacking	Carefully unpack the speaker, and pay attention so you don't accidentally break anything. If possible, save the cardboard box for future transportations. In case there are any visible damages on the loudspeaker, please contact your retailer.
Accessories	2 bass reflex plug 1 User's manual

Practice of sound / Installing and placing tips

	This chapter contains common information about loudspeaker installation and placement.
In which room do you achieve the best sound?	No matter how good the equipment is, in the wrong listening environment it will inevitably sound bad. There are some basic rules concerning a proper loudspeaker installation:
Reflections	Carpets, curtains and soft furniture absorb mid range and high frequency sound, which is preferable. Big empty area reflexes the sound which may lead to a blurry dialogue. Apart from colouring the sound, the perspective of the sound will deteriorate. Reflections in the room can almost be compared to the reflections that cause ghost pictures on a TV screen.
Amplification of bass frequencies	A loudspeaker placed near a wall, ceiling or directly to the floor will be amplified in the lower frequencies in a sometimes not desirable way (since it may lead to an indistinct sound reproduction). This amplification becomes even more obvious if the loudspeaker is placed near a corner. In order to obtain a sound as clear as possible, the loudspeaker should be placed about 30 cm (about 12 inches) away from the wall. However, there are exceptions from this rule. For some type of rooms it may be advantageous to place the loudspeaker closer to the wall.
Furniture	Be aware that some furniture may vibrate and cause interference.
Room dimensions	Quadratic rooms (or rooms where the length is exactly twice as long as the width) should be avoided, since they often create unwanted resonances.
Placing the loudspeakers	The way the loudspeakers are placed towards the listener is of great importance.

The front speakers

For stereo listening the loudspeakers should be placed symmetrically in front of the listener. The distance between the loudspeakers should be about 80% of the distance between the listener and one loudspeaker, or put in another way: the angle between the loudspeakers, as seen from the listener, should be about 45 degrees. This means for example that if the distance between the loudspeakers is 2 meters, the listener should be placed 2,5 meters from the loudspeakers.



Toe-in speakers

Either you can have the loudspeakers angled in towards the listener or you can have them directed straight ahead. Some loudspeakers sound better when angled, but this may also depend on reflections from the side walls. By angling the loudspeakers inwards, you decrease unwanted reflections and you will in the same time have a better stereo perspective.

The correct height

If the loudspeakers are small, they should be placed on stands or tilted so the sound in the best way reaches your ears.

Cables

Try to keep the cables as short as possible. By its electrical parameters, a long conductor will have a bigger influence on the sound than a short one. It may also work as an antenna and thus receive various signals, which may become a constant noise in an active subwoofer. Make sure that all connections are clean and not oxidized. All connections (both signal and speaker cables) should be mechanically stable. Signal cables should be separated from other cables.

Finally

Please remember that good sound is a matter of taste, so you have to experiment to obtain it. We wish you the best of luck!

Mounting and Connecting tips

Mounting alternatives

The wall behind and the wall beside the loudspeaker have influence on both the bass level and the bass characteristics, so take your time, be patient and try different distances to the rear and side walls.

Connect using the correct phase

Be aware of the correct phase, from the + pole on the amplifier to the + pole on the loudspeaker and corresponding for minus (-).

If you accidentally connect the other way, there is no risk of damage. However, the sound will not be correct, especially in the lower frequencies.

Overload

At high load during extensive period of time, there is always a risk of overloading the driver as well as the amplifier.

All loudspeakers have limited high power patience, so be careful not to play extremely loud.
By increasing the bass or treble from average level to maximum it will increase the power by about 16 times.

The initial playing time

It takes about 100 hour of initial playing time, for making the driver to sound optimal. During this time, the speaker may be used normally.

Sound settings

Room Tuning - Mechanical adjustment of the boundary frequency



By using the supplied bass plugs in the bass reflex ports, you can alter the lower boundary frequency of the XTZ 93.21.

Also the treble level may be adjusted, which allows you to perfectly alter the sonic character to fit the room and your equipment.

Closed port

With the bass plug mounted in the bass reflex port, the cabinet is closed and the loudspeaker operates as a closed construction. This provides a tight bass reproduction.

Bass reflex

With no plug present in the ports you obtain a higher bass level and the loudspeaker is capable of handling lower frequencies.

With only one plug in the gate, you get the deepest possible bass response.

These settings also depend on the size and shape of the room and of course, it's all about your own taste, so please take your time and have patience when trying out your preferred setting.

Level adjustment in the treble range

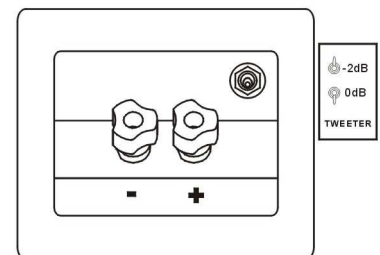
In the treble range the level is adjustable in two different modes using the link on the back of the speaker.

Mode 1: 0dB

In this mode the sound is neutral with a natural, flat frequency response.

Mode 2: -2dB

In this mode the high frequency level is decreased by -2dB.



Crossover/Terminal

We have chosen a -12 dB crossover filter with a fast transient response and minimum phase shiftings.

The gold plated connectors are single wired and offer the possibility to connect the amplifier with banana plugs, forks or pure cable into the speaker terminal.

Technical specifications

Construction type	2-way, bass reflex cabinet that may be set as a closed box. The treble is adjustable in two different levels.
Dimensions	(Width x Height x Depth) 220 x 375 x 180 mm
Weight	8,5 kg/ pc
Magnetically shielded	No
Impedance	4 - 8 ohm
Binding post	Gold plated / Banana plug / Pole screw
Efficiency	87 dB
Power	200 Watts short term IEC 268-5 80 Watts long term IEC 268-5
Tweeter driver	1" Silk soft-dome tweeter, SACD / DVD-Audio-ready, extra strong magnet.
Woofers/midrange driver	6,5" solid coated paper driver, moulded high-flow driver basket, powerful magnet, voice coil former in aluminium, phase plug, weight 2000 gram.
Connections and settings	<ul style="list-style-type: none">• Gold plated single-wiring terminal• Bass reflex, settable to closed box.• The treble level is adjustable in two different modes.

Service & support

"Do-It-Yourself"-service

We apply "do-it-yourself" service on all XTZ products.
If you by yourself are able to find out the defective part, you are fully allowed to remove that part (which would normally be a driver, a filter or the amplifier) and then send it back to us for replacement.

Important!

Always contact your dealer or call us before taking the loudspeaker apart. That can also be helpful for you in order to find the faulty part.
You can of course always choose to return the loudspeaker; therefore you should save the original package.

To aid service, XTZ products are constructed and produced using common technology, so that basically most people are able to unmount the loudspeaker using common tools.

If something is broken

If you cause additional defects by yourself when unmounting the defective part, the warranty still applies if it is obvious that the part had a manufacturing defect. In other cases however, the warranty does not apply if you cause further defects on the loudspeaker.

Where to send the product for a warranty repair

For service we refer to your retailer.

For questions regarding service, welcome to contact us by email support@xtz.se

You will find us at this web page: www.xtz.se

ALWAYS pack the product / part very carefully. Unfortunately damages during transportation are very common. If the package is weak, the transporting company does not compensate damages. Always enclose a copy of the receipt and a description of the defect.

Support

Please contact our free of charge support if you need installation advice, or if any problem occurs during the installation.

Contact us by e-mail support@xtz.se and include your phone number and we will call back to you.

Safety

Read the manual and all safety instructions before using the product.

Do not expose the product for high temperatures
Avoid putting the product in a closed rack or drawer
Be careful with moisture, fluids and dust.
Do not open the product when the power chord is connected
Do not use the ON/OFF button many times in a row
House the product, so that small objects can not fall in to it
At longer absence, make sure to unplug the power chord.

Connection:

Perform all connections, before the power is switched on. Never connect cables to amplifiers and DACs while the power is on.