



99.25 LCR

Owners Manual

IMPORTANT SAFETY INSTRUCTIONS

1. **READ INSTRUCTIONS** - All safety and operating instructions should be read before this product is operated.
2. **RETAIN INSTRUCTIONS** - The safety and operating instructions should be retained for future reference.
3. **HEED WARNINGS** - All warnings on this product and in the operating instructions should be adhered to.
4. **FOLLOW INSTRUCTIONS** - All operating and use instructions should be followed.
5. **WATER & MOISTURE** - Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, laundry, tub, in a wet basement, near a swimming pool, or the like.
6. **ATTACHMENTS** - Do not use any attachments not recommended by the product manufacturer as they may cause hazards.
7. **ACCESSORIES** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with accessories recommended by the manufacturer.
8. **HEAT** - This product should be situated away from heat sources such as radiators, heat registers, stoves, or other equipment that produce heat.
9. **CLEANING** - This product should be cleaned only as recommended by the manufacturer.
10. **OBJECT & LIQUID ENTRY** - Care should be taken so that objects do not fall and liquids are not spilled onto the enclosure.
11. **SERVICING** - Do not attempt to service the product yourself, beyond what is described in these operating instructions.
12. **REPLACEMENT PARTS** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
13. **SAFETY CHECK** - Upon completion of any service or service of repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition. All other servicing should be referred to qualified service personnel.

CONTENTS

Introduction.....	4	
About 99.25 LCR.....	4	
About XTZ.....	4	
Technical presentation.....	5	
Preparations.....	7	
Practice of sound / Installing and placing tips.....	8	
Mounting and connecting tips.....	9	
Sound settings.....	10	
Technical specifications.....	11	
Service & support.....	12	

INTRODUCTION

99.25 LCR offers great possibilities, so in order to utilize your new loudspeaker in the best way; you should carefully read through this manual before using the loudspeaker for the first time. It may take some patience in order to make the loudspeaker sound optimal.

If you have no previous experience of these kinds of installations, or if you have any questions, feel free to contact our free of charge support and we will help you. (See further under the heading of **Support** on the last page of this manual).

ABOUT 99.25 LCR

The 99.25 LCR is the third generation of the 99.25 speaker. It is a 2 way speaker with a true ribbon tweeter and midrange/woofer driver from Seas. This new version has several esthetical and functional improvements and still delivers the same great sound as 99.25 MKII. New stylish aluminum feet for increased stability and usability, a new grill with magnetic mounting, and easier access to the filter for service.

ABOUT XTZ

PHILOSOPHY

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

XTZ GOALS

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

Our concept:

- To produce the perfect compromise.
- Cost-effective manufacturing at a large scale.
- The quality of our products is more important than the marketing.
- Reduce the number of middlemen.

CONTACT US

Website: www.xtz.se

E-mail: info@xtz.se

TECHNICAL PRESENTATION

CABINET DESIGN

The box design with a narrow baffle - is not only an aesthetically neat shape, but also offer advantages in terms of acoustics. The cabinet is made from sturdy MDF board, which offers good sonic qualities. The cabinet is further strengthened with internal bars, which in total ensures a very stable construction.

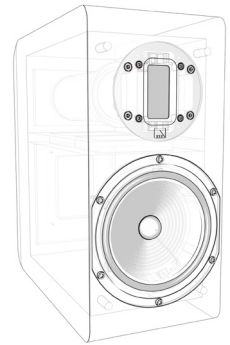
TWEETER DRIVER

We have selected a ribbon tweeter which provides superior transient response and a very flat frequency response. The ribbon cone is super light and only 18 microns thick. It is a sandwich construction made from rosin-aluminum-rosin that has been hardened at 320 degrees Celsius.

The magnet system is a 2 row high-efficient neodymium magnets in a molded chassis of ceramic carbon steel.

Fish-bone shaped contactors in aluminum, results in a low connection resistance and good heat distribution.

The driver has high power durability and handles frequencies up to 40000 Hz which makes it DVD-Audio and SACD-ready.



WOOFER/MIDRANGE DRIVER

After evaluating a large number of drivers from different manufacturers we selected one from Seas, a company that has a solid reputation in the area of high quality speaker drivers. You find Seas drivers in many well-known High End speakers.

For woofer/midrange we decided on a 6,5" magnesium driver from the Seas Excel series that has extremely good performance. We claim that finding a better 6,5" driver on the market is a very difficult task.

The surface treated magnesium cone is extremely light but still extremely stiff and effectively reduces resonances. The rubber surround makes sure that no edge resonances are present.

The molded metal basket is a "high flow" type that is acoustically transparent with high precision as the basket is shaped exactly due to the molding process. This makes sure that the basket is very stable and efficiently reduces resonances. The basket is absolutely non-magnetic, which contributes to a higher efficiency of the driver.

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

Heavy copper rings mounted above and below the T-shaped pole piece reduce non linear- and modulation-distortion and increases the overload margin.

The copper plating of the top and bottom plates along with a solid copper phase plug improves the heat conduction and thus contributes to the high power durability.

Large windows in the basket both above and below the spider reduces sound reflection, air flow noise and cavity resonances.

CROSSOVER / BINDING POST

We have selected a -12/18 dB crossover that has a fast transient response and a minimum of phase shifting.

The connectors are bi-wiring types so you can connect to the amplifier with double cables (bi-wiring), or connect to two amplifiers (bi-amping) for further improvement of the sound. The following connecting methods are available:

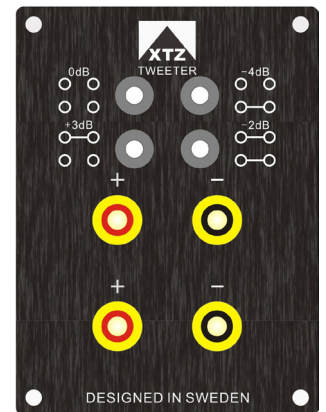
1. Upper terminal + lower terminal (loops present)

Default setting, the loudspeaker is fed with the entire frequency range.

Without the loop between upper and lower terminal:

2. Upper terminal. The signal is only fed to the tweeter.

3. Lower terminal. Now the signal is fed to the woofer only.



PREPARATIONS

UNPACKING

Carefully unpack the speaker, and pay attention so you don't break anything. If possible, save the box for future transportations. If there should be damage to the loudspeaker, please contact your retailer.

ACCESSORIES

User manual
Rubber feet
Grill
Loops for level adjustment
Bass reflex plug

PRACTICE OF SOUND / INSTALLING AND PLACING TIPS

This chapter contains common information on loudspeaker placement and installation.

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 midrange and high frequency sound, and this is preferable. A large empty area, on the contrary, reflects it and produces a hard sound that may lead to a blurry dialogue. Apart from coloring the sound, also the perspective of the sound will deteriorate.

AMPLIFICATION OF BASS FREQUENCIES

A loudspeaker that is placed near a wall, ceiling or floor will be amplified in the lower frequencies in a sometimes not desirable way (since it may lead to an indistinct sound recreation). This amplification becomes even more obvious if the loudspeaker is placed near a corner. Thus, for 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 walls / rooms it may be advantageous to place the loudspeaker closer to the wall.

FURNITURE

Be aware that furniture may vibrate and thus create bad low frequency sound.

ROOM DIMENSIONS

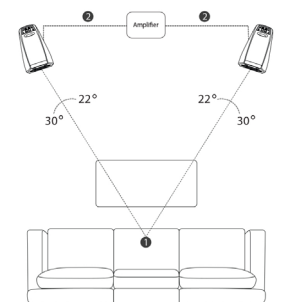
Quadratic rooms or rooms where the length is exactly twice as long as the width should be avoided, since they may create unwanted resonance.

PLACING THE LOUSPEAKERS

How 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.



ANGLING?

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 thus you get a better stereo perspective.

THE CORRECT HEIGHT

If the loudspeakers are small, they should be placed on stands or tilted so that they are on the same level as the ears.

CABLES

Try to keep them as short as possible. By its electrical parameters, a long conductor will have a larger influence on the sound than a short one. The subwoofer cable should be shielded, to avoid noise.

Make sure that all connections are clean and not oxidized. All connections should be mechanically stable, both power, signal and loudspeaker cables. 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

Normally the 99.36 FLR is placed standing by a wall. The wall behind and the wall beside the loudspeaker have influence on both the bass level and the bass characteristics, so please be patient and try different distances to the rear and side walls.

CONNECTING USING THE CORRECT PHASE

Always connect using the correct phase, from the +-pole on the amplifier to the +-pole on the loudspeaker and corresponding for minus (-).

If you by accident 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 time periods, there is always the risk of overloading the driver and amplifier.

All loudspeakers have a limited patience for high power, so be careful not to play extremely loud and not to increase treble or bass settings too much.

By increasing the bass or treble from 0 to max you will increase the power by about 16 times.

THE INITIAL PLAYING TIME

It takes about 50 to 100 hours of initial playing time, for 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 plug in the bass reflex port, you can alter the lower boundary frequency on the XTZ 99.25 MKII. Also the treble level may be adjusted, which allows you to perfectly adjust the parameters to fit the room, equipment and your own taste.

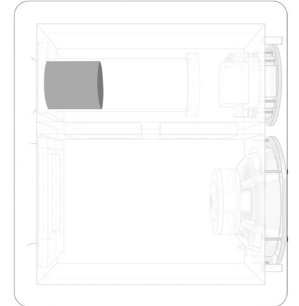
Closed port

With the bass plug mounted in the bass reflex port, the cabinet is closed and the loudspeaker operates as a closed construction which produces a more "tight" bass reproduction.

Bass reflex

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

These settings also depend on the size and shape of the room, and also on your own taste, so please have patience when trying out your preferred setting.



LEVEL ADJUSTMENT IN THE TREBLE RANGE

In the treble range the level is adjustable in four different steps using the supplied loop connectors.

Level adjustment in the treble range:

Mode 1/ 0dB

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

Mode 2/ +3dB

In this mode the treble level is increased by 3dB.

Mode 3/ -2dB

In this mode the treble level is decreased by 2dB.

Mode 4/ -4dB

In this mode the treble level is decreased by 4dB.

BINDING POST/BIWIRING

We have selected a -12 dB crossover that has a fast transient response and a minimum of phase shifting. The connectors are bi-wiring types so you can connect to the amplifier with double cables (bi-wiring), or connect to two amplifiers (bi-amping) for further improvement of the sound.

The following connecting modes are available:

1. Upper terminal + lower terminal (loops present)

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3. Lower terminal. Now the signal is fed to the woofer only.

*Note!
Make sure that all jumpers are connected.
A loose jumper may cause a short-circuit if they jam between the terminals.*

TECHNICAL SPECIFICATIONS

CONSTRUCTION TYPE	2 way Bass reflex cabinet that may be set as a closed box, the treble is adjustable in four different levels.	
DIMENSIONS	200 x 370 x 330 mm (W x H x D)	(without grill)
WEIGHT	10 kg /pcs	
MAGNETICALLY SHIELDED	No	
NOMINAL IMPEDANCE	4-8 ohm	
FREQUENCY RESPONSE	40 [36] - 40.000 [40.000] Hz - Anechoic [typical room]	
BINDING POSTS	Bi-wiring/Banana plug / Fork (Spade) / Pole screw	
EFFICIENCY	88 dB	
POWER	300 W Short term IEC 268-5 100 W Long term IEC 268-5	
TWEETER DRIVER	Ribbon tweeter, SACD/DVD-Audio-ready, Sandwich ribbon cone in aluminum, neodymium magnets, chassis made in ceramic carbon steel.	
WOOFER/MIDRANGE DRIVER	6,5" SEAS Excel, Magnesium driver, molded "high flow" driver basket, powerful magnet, weight 1900 gram, shielded.	
CONNECTIONS AND SETTINGS	Bi-wiring/Bi-amping possible. Bass reflex adjustable to closed box. Treble level adjustable in 4 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 what part of the loudspeaker is defective, you are fully allowed to unmount that part (which would normally be a driver, a filter or the amplifier) and send it back to us for exchange.

IMPORTANT!

Always contact your dealer or us before taking the loudspeaker apart. It can also help you finding the fault.

You can of course always choose to return the whole 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 "unscrew" the loudspeaker using common tools..

IF SOMETHING IS BROKEN

If you cause additional defects by yourself when unmount 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 other defects on the loudspeaker

WHERE TO SEND THE PRODUCT FOR A WARRANTY REPAIR

For service we refer to your retailer.

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

Website: 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 if you wish verbal help, and we will call you back.