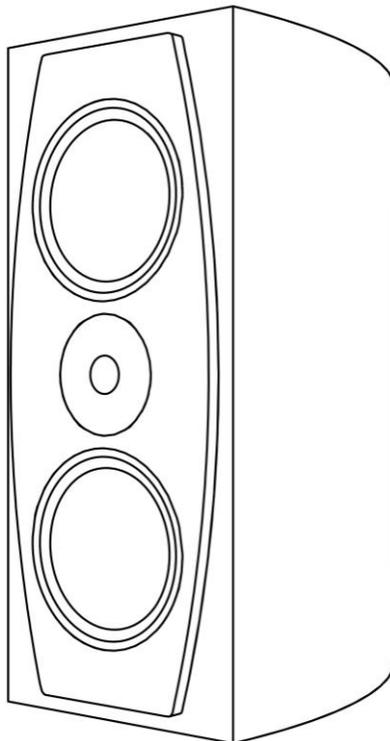




100.33

Divine



User manual

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Contents

Congratulations of your purchase of the XTZ Divine 100.33.

When combined in your HiFi- and audio equipment; you will experience motion pictures or music records reproduced very deeply and naturally. Now when you watch your favourite movies or listen to your reference music CDs, you will hear and feel the sound surrounding you in the same way as originally intended by mastering engineers.

Read the manual before using the product and use all possibilities carefully. If you have any problems with the installation don't hesitate to contact our free support.



About XTZ

Philosophy

Our reference and starting point is to recreate a natural sound, taking into account that acoustics always is a matter of taste.

XTZ Goal

Our main goal is to provide the best value for money.

Our concept:

- Cut down the numbers of middlemen
- Put more money on product quality and less on advertising.
- Manufacture cost-effective in large volume.
- Provide perfect technical solutions.

Contact

Website: www.xtz.se
E-mail: info@xtz.se

Technical presentation

Cabinet design

The cabinet is a special design for a totally optimized construction. Everything is optimized for its reason and only the best solutions were chosen to obtain the best possible construction for sound reproduction.

The cabinet wall is built with strong MDF board. A convex wall construction is much stronger than a normal flat one. This means that the convex walls can be thinner without losing strength. Still, the walls are 25 mm thick. The internal modes are reduced a great deal if the walls are not flat and parallel. The result is an extremely silent construction with no inner resonances. The front baffle is a 45 mm dual layer MDF construction.

The top and bottom of the speaker is made from 25 mm massive MDF. The cabinet has a total of 3 internal bars for the best performance.

Finally the back of the speaker is similar to the front with two layer of MDF and reach a 65 mm thick MDF.

The three internal bars reduce the inner resonances and break up the standing waves inside the cabinet. The cabinet is well damped and absorbing materials are completely optimized. We put a lot of effort into obtaining the best mix of natural and synthetic wool to optimize resonance reduction.

Tweeter driver

We have chosen an ultra fast ceramic tweeter, made for reproducing crystal clear sound, even at a high SPL levels without any distortion.

The tweeter is produced by the German company Visaton, and is an absolute reference class unit. It is shielded, with an internally damped cavity and a ventilated voice coil. The tweeter offers an extremely flat frequency response and low distortion.

Woofers / midrange driver

Thiel & Partner, also called Accuton, is one of the most famous manufacturers of loudspeaker drivers.

XTZ Divine 100.33 uses T & H C173-11-191, a 6,5" driver in the top of the line. This woofer and midrange driver is in the top of the world and can only be found in extreme High End loudspeakers.

T&P C173-11-191 is a ceramic driver with a light cone, equipped with a neodymium magnet. The driver is extremely stiff and at the same time light, which contributes to the high sensitivity.

Crossover/Terminal

When XTZ produced the Divine 100.33 a great deal of effort was put into the crossover filter. All passive components are of the highest possible quality to minimize the influence on the signal.

We use an optimal selection of air wound coils (with low internal resistance) and coils with steel cores (these accept a high level of magnetic saturation), MKP capacitors and MOX resistors.

The connectors are gold-plated and of bi-wiring type. This makes it possible to connect the amplifier with two cables (bi-wiring) or connect to two amplifiers (bi-amping) for further improving of the sound.

There are two links/jumpers that can be used to alter the sound character of the speaker.

Preparations

Unpacking

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

Accessories

User manual

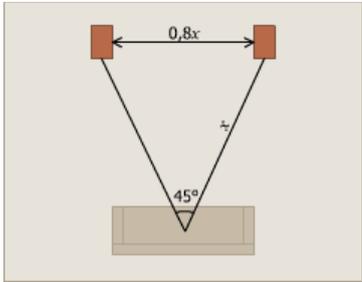
Bass reflex plugs (2 pcs)

Links/Jumpers for level adjustment (2 pcs)

Cradle for center usage

Rotatable Magnetic Logo

Practice of sound / Installation and placement tips

	<p>This chapter contains general information about loudspeaker placement and installation.</p>	<p>These are general rules, so there are exceptions in some cases.</p>
In which room do you achieve the best sound?	<p>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:</p>	
Furnishings / Sound quality	<p>Carpets, curtains and soft furniture absorb mid-range and high frequency sound, and this is preferable. Big empty area, on the contrary, reflects it and produces hard reflections that may lead to blurry dialogue. Apart from colouring the sound, also the perspective of the sound will deteriorate. More furnishings attenuate unwanted resonances and act as diffusers, which can improve the sound dramatically.</p>	
Amplification of bass frequencies	<p>A loudspeaker that is placed near a wall, ceiling or floor will amplify 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 at least 30 cm (about 12 inch) away from the wall.</p> <p>Some constructions are made to be placed closed to a wall.</p>	
Room dimension	<p>Quadratic rooms or rooms where the length is exactly twice as long as the width should be avoided. Since they may create unwanted resonance.</p>	
Placement of the loudspeakers	<p>How you place the speakers in relation to the audience is important to get a good soundstage.</p>	
Front speakers	<p>To get the best result the front speakers should be placed symmetrical in front of the listener. The distance between the front speakers should be around 80% of the distance to the listener. In other words, the recommended angle between the front speakers should be 45°.</p>	
Angle the loudspeakers	<p>Either you can angle the speakers toward the listener, or let them stand in a straight-forward position. Some speaker sound better when they are angled inward, but it can also be caused by reflections from side walls. If they are angled reduces glare and reflections from the walls and thereby enhances the stereo image.</p>	

Correct height

If the loudspeakers are small they should be placed on a stand or tilted so the sound will level with the ears.

Placement of the subwoofer

The placement of the subwoofer in the room dramatically affects the overall frequency response and sound pressure level of the system. At low frequencies the effect of the room is strong. Even a slight change in the subwoofer's location can make a significant difference in the frequency balance. Patience and methodical experimentation is needed to find an optimal placement. The placement affects the phase difference between the main loudspeakers and the subwoofer.

One basic rule is to place the subwoofer together with or near the front system (especially important if the front loudspeaker also propagate bass frequencies) as this will minimize the risk of phase eliminations in the room.

Why use 2 Subwoofer

The benefits of having two subwoofers instead of one:

- The sound pressure level will be higher.
- Less dips and standing waves and a better frequency response in the room (and in sweet spot).
- The need of power is less, to reach the same SPL as with one subwoofer.

Cables

Try to keep them 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 that may become a constant noise in an active subwoofer.

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 your favourite one.
We wish you best of luck!

Mounting and connecting tips

Mounting alternatives

XTZ Divine 100.33 can be placed standing or lying by a wall. The wall behind and beside the loudspeaker influences both the bass level and the bass characteristics, so please be patient and try different distances to the rear and side walls. In lying position you may place the speaker in the associated cradle.

To place the speaker with a distance to the wall is often best, to decrease influence of the wall (room).

Connect 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 handling capacity for high power, so be careful not to play extremely loud and not to increase treble or bass settings to 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 drivers 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 gates, you can alter the lower boundary frequency of XTZ Divine 100.33.

This setting also depends on the size and shape of the room, and also on your own taste, so please has patience when trying out your preferred setting.

The bass level can be adjusted in 3 different settings in the bass range.

The figure below illustrates three basic settings.

Deep bass

With two bass plugs in the two gates you will reach the deepest possible bass, which may be suitable for smaller rooms.

"Quick" bass

Using one or none of the bass reflex plugs in the gates, you have a "quick" bass which is especially suitable for large rooms where the lower frequencies often are amplified by the room.

Closed box

With two plugs in the two gates you have the most flat and neutral frequency response.



This schematic picture (which does not shown actual measured curves) elucidates the different sonic characteristics of the bass frequencies.

Basic setting for neutral bass reproduction

Since the acoustics is determined by a wide range of external factors there exists no single neutral setting that will work properly for all cases.

External factors that have influence on the sound include the room, the placing, output levels etc.

Level adjustment

Tweeter:

Mode 1/ -4 dB

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

Mode 2/ +4 dB

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

Mode 3/ 0 dB

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

Mode 4/ -2 dB

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



The tweeter level can be adjusted with the jumpers.

Technical specifications

Construction type	2 -way High End speaker with bass reflex cabinet that may be set as a closed box, and a total of three individual bass modes (Room Tuning). Treble level can be adjusted in 4 steps.
Dimensions	270 x 600 x 400 mm (W x H x D) 10,6 x 23,6 x 15,7 inch (W x H x D)
Weight	26,5 kg / 58,4 lb (pc)
Cross over frequency	2000Hz
Magnetically shielded	No
Nom. Impedance	4 ohm
Binding post	Gold plated tri-wiring / Banana plug / Pole screw
Efficiency	89dB
Power	350 W Short term IEC 268-5 175 W Long term IEC 268-5
Tweeter	Visaton ceramic tweeter. Magnetically shielded. Weight 1kg
Woofer / Midrange	Thiel & Partner C173-11-191. Weight 2,3 kg.
Connections and settings	<ul style="list-style-type: none">• Gold plated bi-wiring.• Bass reflex, can be set to closed box (Room Tuning).• The bass can be set to three distinct modes using the supplied bass plugs• The treble level is adjustable in 4 different modes.

Service & support

Where to send the product for a warranty repair

For service we refer to your retailer.

For questions regarding service, contact us by email **info@xtz.se**.

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. Save the original carton for future transport.

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.