

CANTON



R

REFERENCE

MANUAL

ICONIC SOUND

Thank you for the trust you have placed in Canton by purchasing our loudspeakers. By selecting our high-end Reference speakers, you have showcased your discerning taste for superior sound and craftsmanship.

Our Reference series is a finely crafted masterpiece, where every detail has been carefully thought out and implemented at the highest level to create a unique listening experience. All materials have been refined and redeveloped for a sound quality that meets even the highest demands. And visually, we've taken our Reference series to a new level: The cabinet features numerous sweeping curves that make the elegant design a true statement. The result is a speaker series that sets new standards in craftsmanship and sound, crafted with attention to detail and passion for music.

Please read these operating instructions carefully before setting up and connecting your Reference speakers. It will help you get the most out of your system. Canton has a distribution network in over 50 countries. If you have any questions, this team of experienced distributors, together with authorized dealers, will be happy to help.

The Canton team wishes you much pleasure and long satisfaction with your speakers!

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SAFETY INSTRUCTIONS



Attention:

Proper setup and connection of the speaker are the responsibility of the user. Canton cannot accept any responsibility for damage or accidents caused by improper setup or improper connection!

Important safety instruction!

Read and follow all instructions. Keep these instructions and hand over all documents when passing the device on to third parties. Observe all warnings and safety instructions.

Operate this device only in a moderate climate (not in a tropical climate). Only operate this device indoors, not outdoors or in damp areas. To reduce the risk of fire or electric shock, do not expose this device to rain or moisture. Do not operate this device near water. Do not expose this device to dripping or splashing water. Strong temperature fluctuations lead to condensation (water droplets) in the device. Wait until the moisture has evaporated (min. 3 hours) before starting up the device. Do not place any objects filled with liquids (such as vases) on the device. Do not place naked flames, such as lighted candles, on or near the device. Do not place the device near heat sources such as radiators, heat accumulators, ovens or other devices (including amplifiers) that generate heat. Prevent direct sunlight. Never touch the signal and power cables with wet hands.

Set up the device according to the manufacturer's instructions. Always choose a level surface. The device must be perpendicular. Do not set up the device in direct proximity to an edge (table or shelf edge) or (stair-) step in order to prevent it from falling down due to vibrations. If necessary, secure the device against falling down. Do not exert force on operating elements, connections and cables. Do not insert any objects or body parts into the openings of the device. Live parts inside the enclosure could be touched and/or damaged. This can lead to short circuits, electric shocks and fire.



Use only mounting hardware and accessories that are approved by the manufacturer and/or sold with the device. Use only wheeled trolleys, stands, tripods, holders or tables specified by the manufacturer or sold with the unit. When using a trolley, move the trolley/device assembly carefully to avoid damage and injury from tip-over.

Only clean this device with a clean, dry cloth. Do not use any aggressive, alcoholic or abrasive agents for cleaning. Consult qualified specialists for all repair and maintenance work. This is required if the device is damaged in any way, such as if connections are damaged, if liquids or objects have entered the device, if it has been exposed to rain or moisture, if it is not working properly, or if it has been dropped.

Do not make any modifications to the device or accessories. Unauthorized modifications may affect safety, legal compliance or system performance. In this case, the operating permit/warranty may be voided.



If sound distortions such as unnatural knocking, thumping or high-frequency clicking occur during playback, reduce the volume level immediately. To avoid possible hearing damage, do not listen at high levels for extended periods of time. Interrupt playback if you hear ringing or whistling noises in your ears or have the impression that you can no longer perceive high-pitched sounds (even briefly).



The device and/or the accessory pack may contain small parts that can be swallowed. There is a risk of choking! Therefore not suitable for children under 3 years.

Passive loudspeakers must never be connected to the mains, but only to the corresponding amplifier output sockets. Do not mount connectors on speaker cables that can also be connected to the mains (socket) such as 4mm plugs (so-called banana plugs).



This symbol draws your attention to important operating and maintenance instructions on the product or in the accompanying documents (instructions) supplied with the product.

OPERATING NOTES

Canton speakers are suitable with amplifiers with high output power, even if this is higher than the power handling specified in the technical data of the Canton speaker. In fact, a danger to the loudspeaker comes rather from low-power amplifiers, since they are overdriven when trying to generate more sound pressure by "turning up" volume and tone controls. Distortion can be generated by so-called "clipping", which can destroy the tweeters of the loudspeakers in particular. Therefore, please pay attention to distortions when adjusting the volume and reduce the volume immediately if necessary.



Attention:

Floorstanding loudspeakers have a high center of gravity and can easily tip over if they are not set up correctly or if they are moved abruptly. It is the user's responsibility to avoid this.

Further notes

Intended use:

The speaker system is designed for indoor use and must not be used outdoors or in wet environments. The device must not be altered or modified. Connect the device as described in the instructions and observe the safety instructions. Load the device with the maximum input power specified on the type plate.



Electrical and electronic equipment placed on the market within the European Union must bear a CE mark to indicate that the equipment complies with the applicable requirements (e.g. on equipment safety or electromagnetic compatibility).



In accordance with the EU Directive on Waste Electrical and Electronic Equipment, devices marked with this symbol must not be disposed of with household waste. If necessary, please contact your local waste disposal company or the municipal/city administration for information on how to dispose of this equipment free of charge. It serves the protection of the environment and health as well as the saving of (rare) raw materials through reuse (recycling).

CONNECTING THE SPEAKERS

On the back of your Reference speakers you will find the connection terminal. This terminal is used to connect your Reference speaker to the amplifier. When connecting the speakers, be sure to observe the correct polarity. Plus to plus and minus to minus. Both the screw terminals of the loudspeakers (plus pole = red, minus pole = white) and the connections of the control unit are marked with corresponding symbols or colors. For easier orientation, the wires of most speaker cables also differ by color, shape or imprint. Different polarity between the left and the right channel lead to sound distortions and audible cancellations in the bass range. For a better understanding, please also consult the operating instructions of your control unit.

In order to develop its maximum performance, a loudspeaker requires a break-in period of approx. 15–20 operating hours. During this time, the properties of many mechanical components change until they reach the values specified during the development of the loudspeaker, i.e. the suspension of the chassis becomes more flexible and the reproduction quality is positively influenced.

Notes:

- Please make sure to use high quality speaker cables. Inferior cables can negatively affect the sound quality of your speakers and thus the sound experience.
- For the left and right channels, the speaker cables should ideally be about the same length. Speaker cables of different lengths can lead to a difference in volume between the two channels.
- Please ensure that the speaker cables have a sufficient cross-section (min. 1.5 mm²). Speaker cables with a very small conductor cross-section have a higher line resistance, which can impair the sound experience.



Attention:

Before connecting the speakers, switch off all components of your system, but at least the (power) amplifier(s).

INSTALLATION TIPS

For the new Reference series, we recommend a wall distance of 20 centimeters to 1 meter and a slight angle of up to 5° inward. Decide for yourself which set-up suits you best in terms of linearity and imaging fidelity. A good orientation for an optimal placement of your new loudspeakers is the so-called "stereo triangle" (Fig. 1). This results when the loudspeakers and your listening position form the corners of an equilateral triangle.

For decoupling and to compensate for any unevenness, your Reference loudspeakers are equipped with four height-adjustable device feet (Fig. 2). Depending on the floor covering, self-adhesive shock absorbers can be additionally fitted here (Fig. 3).

Fig. 1

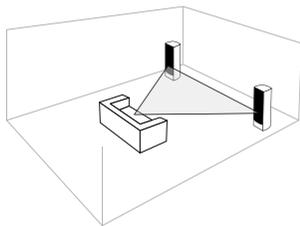


Fig. 2

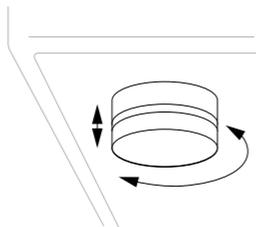
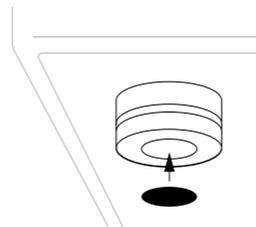


Fig. 3



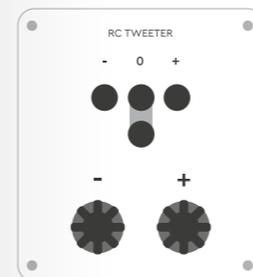
HOME-CINEMA SETUP

Depending on the number of speakers used, they are arranged differently. Please refer to the manual of your AV receiver for the ideal setup for your chosen configuration. In general, the following guidelines apply: place the center speaker directly in front (below the TV), position the front left and front right speakers at approximately 30° to the sides, position the surround left and surround right speakers at approximately 110° to the sides, and place the subwoofer between the TV and the front left or right speakers.

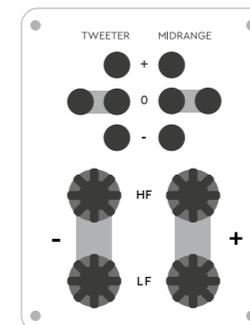
CONNECTION TERMINALS

The Reference series features WBT nextgen™ connection terminals, which ensure a high-quality and long-term stable connection. Additionally, depending on the speaker model, the terminal provides adjustment options for the tweeter, midrange, and low-frequency ranges. This allows the speakers to be adapted to the spatial conditions or tuned to personal sound preferences by raising or lowering the level in frequency-critical areas by +/- 1.5 dB. By particularly adjusting the mid-frequency range, the reproduction can be optimized in terms of balanced sound imaging and volume representation. Human voices should exhibit a natural sound image and size representation.

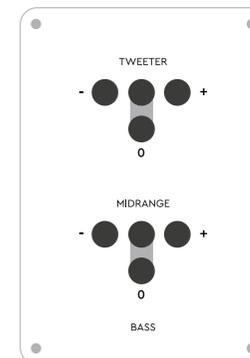
The Reference series offers the following setting options*:



Reference 9
Tweeter adjustment



Floorstanding speakers & Center
Tweeter and midrange adjustment



Reference Alpha
Tweeter-, midrange-, bass adjustment

*Terminals compressed for display purposes

BI-WIRING & BI-AMPING OPERATION

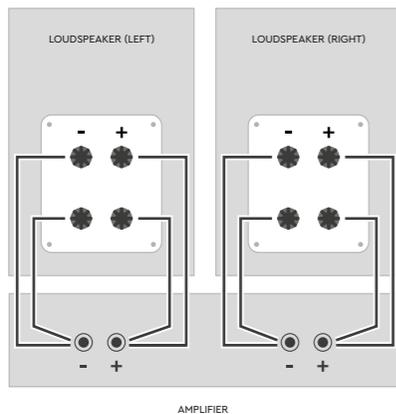
The speakers of the Reference series offer the option of operating the high/mid range and the bass range separately via two amplifiers (bi-amping) or at least via two separate speaker cables (bi-wiring). For this purpose, these speakers are equipped with a double terminal (excluding Reference 9). The upper pair of terminals is responsible for the high/mid range, and the lower pair is for the bass range. These two pairs of terminals are factory-connected with (cable) bridges for normal operation (with a single speaker cable).



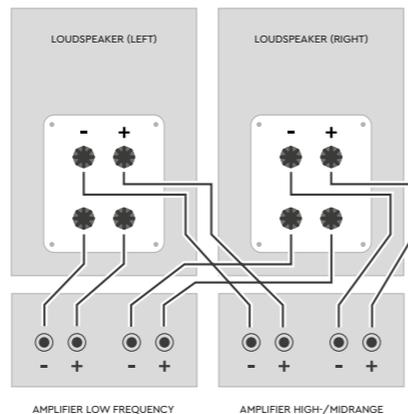
Attention:

For Bi-Wiring and especially Bi-Amping operation, it is essential to remove the (cable) bridges, as they can potentially damage the connected amplifiers. To do this, please loosen or remove the binding posts and pull out the cable bridges to the side resp. the metal bridges to the front.

Bi-Wiring:



Bi-Amping:



TROUBLESHOOTING

Below you will find an overview of the most frequently occurring problems.

Problem	Possible reason	Solution
No audio signal comes out of the speaker	Loudspeaker cable not or not correctly connected to (power) amplifier and/or loudspeaker	Connect speaker cable correctly to amplifier and/or speaker
Too less low frequency (bass)	(One) speaker polarity is reversed	Check and correct polarity at loudspeakers and (power) amplifier
Unclean spatial imaging (e.g. voices do not come from the center)	The distance between the two speakers to the listening position is different	Make sure that the distance between the listening position and each speaker is the same
One speaker is louder than the other	1. The distance to the two speakers is different	1. Establish equal distances between listening position and each loudspeaker
	2. For amplifiers with balance control, the balance is adjusted to one side	2. Correct the balance setting on the amplifier
The speakers distort	Your power (amplifier) is overloaded	Immediately reduce the volume (until your amplifier is no longer overloaded). The output power of the amplifier should be at least equal to the rated power handling of the speakers. (see also chapter "Operating notes")

TROUBLESHOOTING

Problem	Possible reason	Solution
Only low frequency and no mid/high frequency can be heard from a loudspeaker, or only the mid/high frequency range and no low frequency can be heard	1. You are operating a loudspeaker with bi-wiring/ bi-amping terminal in single-wiring mode and the (cable) bridges have been removed from the terminal	1. Re-install the bridges between the connector for bass and midrange/tweeter
	2. You are operating a loudspeaker in bi-wiring mode and the loudspeaker cable has come loose at the bass or midrange/tweeter connection	2. Check the connection and connect the cable correctly
	3. You are operating a loudspeaker in bi-amping mode and one of the power amplifiers is not in operation or not connected correctly	3. Check your equipment and make sure that your power amplifiers are in operation and correctly connected
The sound of the speakers sounds different	The level adjustment on the speakers is set differently	Set the level adjustment for both speakers to the same value (-1.5 dB / 0 dB / +1.5 dB)
The speaker is not stable and wobbles	1. The ground is uneven	1. Level out unevenness by adjusting the height-adjustable device feet
	2. The device feet are not mounted correctly or are set differently in height	2. Adjust the device feet so that the speaker stands straight and does not wobble

If you have any further questions, please contact our customer service at the telephone number +49 (0)6083 287-87, via email at service@canton.de, or reach out to your Canton dealer.

WARRANTY

Above and beyond the legally prescribed warranty period Canton offers a warranty of 10 years on all its passive loudspeakers of the Reference series. A two-year warranty is offered for active speakers and partially active boxes. The warranty period begins at the time of purchase and only applies to the purchaser. Warranty claims will only be accepted if accompanied by the original packaging. The warranty does not cover damages incurred in transit or damages caused by improper use. The warranty is not extended if parts are exchanged within the period covered by the warranty. This applies to all loudspeakers purchased from an authorised Canton dealer. In the event of damage please contact your dealer or directly the Canton Service department.



For further questions, please do not hesitate to contact our Customer Service:

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