

The logo for CANTON, featuring the word "CANTON" in a bold, sans-serif font. The letter "C" is stylized with a diagonal slash through it.

CANTON

MANUAL
PASSIVE LOUDSPEAKER

THANK YOU!

Thank you for choosing a Canton product.
You can now look forward to many hours of listening to excellent sound.

If you have any questions or require further information, please do not hesitate to contact us.

Service telephone: +49 (0)6083 / 287-87
Service e-mail: service@canton.de

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

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 (the instructions in this paragraph do not apply to "outdoor speakers").

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. Never touch signal and mains cables with wet hands. 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.

Set up the device according to the manufacturer's instructions. Always choose a level surface. The device must be perpendicular. The load-bearing capacity of the base (surface) must be checked before setting up the device. If there is any uncertainty due to the weight, a specialist should be consulted. Regularly check the stability of the device and the stability of the base. 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.

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).



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 license/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 contains permanent magnets. Do not place any objects on or directly next to the device that may react sensitively to magnetic fields (e.g. CRT televisions, external hard disks, magnetic cards, video cassettes, etc.).



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. Never leave children unattended with the packaging material. Children often underestimate the dangers. Always keep children away from the product.



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



Other important safety instructions for on-wall speakers (wall-mounted speakers):

Follow all installation and safety instructions. Otherwise, there is a risk of injury and damage to property. Install the device in accordance with the manufacturer's instructions. To avoid damage/injury, the device must be securely attached to the wall in accordance with the instructions.

Ensure that the wall has sufficient load-bearing capacity for the device.

Ensure that there are no electrical cables or pipes (gas, water, heating, etc.) at the fixing point in the wall. Drilling into cables and/or pipes can lead to electric shock, fire, explosion, scalding, etc. There is a danger to life! If necessary, contact a specialist.

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. Do not operate the unit with more than the input power specified on the rating 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 recycling.

GENERAL INFORMATION

Canton loudspeakers are suitable for use with amplifiers with high output power, even if this is higher than the load capacity specified in the technical data of the Canton loudspeaker. In fact, low-power amplifiers pose more of a risk to the speaker, as they are overdriven when trying to generate more sound pressure by "turning up" the volume and tone controls. So-called "clipping" can cause distortions, which can destroy the tweeters of the speakers in particular. Therefore, pay attention to distortions when adjusting the volume and reduce the volume immediately if necessary.

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 have reached 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.



Attention:

Floor-standing loudspeakers have a high center of gravity and can easily tip over if set up incorrectly or moved jerkily. The user is responsible for preventing this. Therefore, only set up floorstanding speakers on a level surface that has sufficient load-bearing capacity. The speaker must be positioned vertically.

POSITIONING IN THE ROOM

Stereo operation:

When using two speakers, they should ideally be arranged in a so-called stereo triangle (equilateral triangle). The distance between the speakers is equal to the distance between each speaker and the listening position (see Fig. 1).

Multi-channel operation:

These are arranged differently depending on the number of speakers used. Please refer to the manual of your AV amplifier for the ideal positioning for your chosen setup. Basically, the following applies: Center straight ahead (under the TV), front left and front right each approx. 22°-30° to the side, surround left and surround right each approx. 110°-120° to the side, subwoofer between TV and front left or right (see Fig. 2).

Wall distance:

If possible, the speaker should not be positioned in a corner of the room and should be at least 30 cm away from the (rear) wall (see Fig. 3). This requirement does not apply to on-wall speakers.

Fig. 1

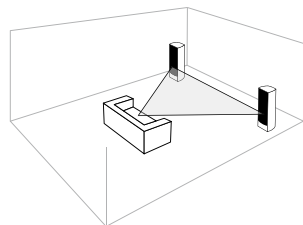


Fig. 2

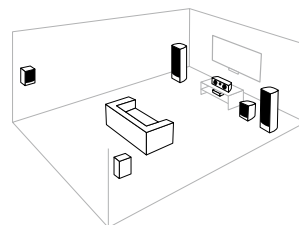
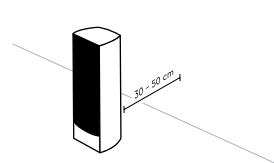


Fig. 3



INSTALLATION / ASSEMBLY

Device feet:

For installation on hard surfaces such as stone, wood or glass floors (floorstanding, compact and center speakers) or wall mounting (on-wall speakers), please attach the supplied (self-adhesive) device feet or spikes to the bottom or rear of the speaker. These can be omitted for installation on carpeted floors or similar. The height of the spikes can be adjusted to compensate for height differences (see Fig. 4 and 5).

Fig. 4

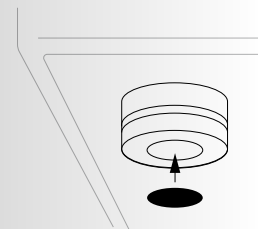
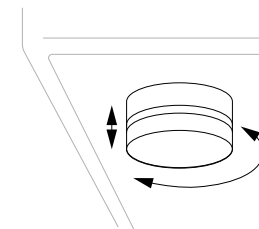


Fig. 5



Speaker stand (optional accessory):

Suitable speaker stands are available as accessories for all compact and center speakers for free-standing installation in the room.

Wall mount:

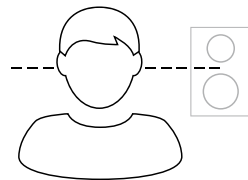
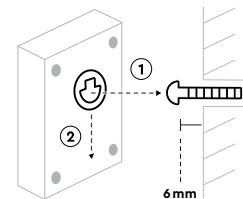
If a wall speaker is not supplied with a wall bracket (possibly integrated in the housing), you can use the optionally available "Cantomount" bracket from Canton.

Notes:

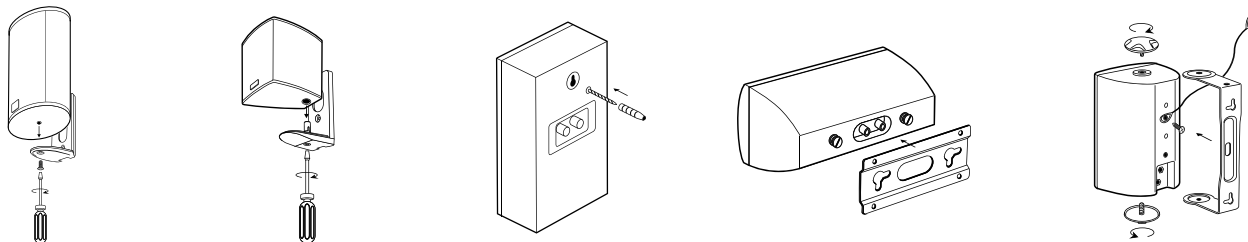
- Speakers for wall mounting should be positioned at approximately ear level (see Fig. 6).
- When using the supplied (self-adhesive) device feet for loudspeakers with an integrated wall bracket, the back of the screw head that is to be used to mount the loudspeaker must be 6 mm away from the wall (see Fig. 7).



- Speakers that are supplied with a safety cable (fall protection) must be secured against falling by this safety cable when mounted overhead (mounting height > 1m). For use in public and commercial areas, the locally applicable safety regulations must be procured and complied with independently.

Fig. 6**Fig. 7**

Attach your speakers to the wall bracket as shown and check that they are correctly seated. If the wall bracket is not included with your speakers, you can obtain it as a "Cantomount" wall bracket from a specialist retailer.



CONNECTION OPTIONS

**Attention:**

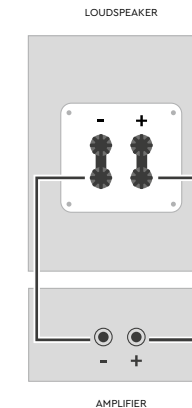
- Before connecting the speakers, switch off at least the (power) amplifier(s) to prevent them from being damaged by a short circuit.
- For bi-amping operation, the (cable) jumpers on the speaker terminal must be removed, otherwise the connected amplifiers may be damaged. To do this, loosen or remove the pole terminals and pull out the cable bridges to the side or the metal bridges to the front.

Notes:

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

Default (Single-Wiring):

A speaker cable is laid from the amplifier to the speaker. Pay attention to the correct polarity (plus/red to plus/red and minus/black or white to minus/black/white) and the correct assignment of the sides (left/right).



Bi-Wiring:

If your speakers have terminals with two separate connectors for the bass range and the mid/high range, you have the option of laying two speaker cables from one amplifier output to one speaker. This allows you to use a cable with a high conductor cross-section and low line resistance (e.g. $2 \times 6 \text{ mm}^2$) for the bass range and a cable with a lower cross-section and therefore lower line capacitance (e.g. $2 \times 2.5 \text{ mm}^2$) for the mid/high range.

Note:

In bi-wiring mode, please remove the jumpers attached to the speaker terminal.

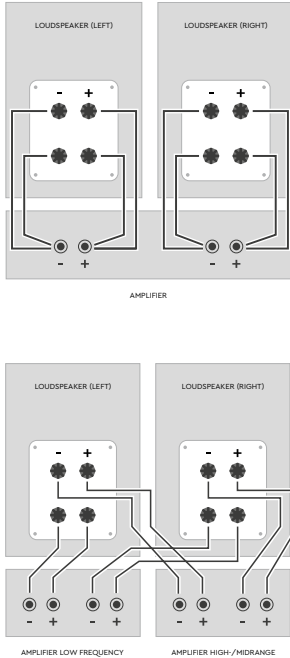
Bi-Amping:

With bi-amping, two amplifier channels or two mono amplifiers are used for each speaker. This completely decouples the bass range and the mid/high range, so that a high current requirement for the woofers does not lead to an unclear signal for the mid/high range. This results in a cleaner sound, especially at high volumes.



Warning:

In bi-amping mode, the jumpers attached to the speaker terminal must be removed!



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(s)
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 "General Information")

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) jumpers have been removed from the terminal	1. Re-install the jumpers between the connectors 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

Your provider and contracting party:

Canton Elektronik GmbH + Co. KG, Neugasse 21–23, 61276 Weilrod
Managing Directors: Christoph Kraus, Günther Seitz
Phone: +49 (0)6083 2870, E-Mail: info@canton.de
VAT Identification Number (Ust-IdNr.):
DE 111294343, WEEE Registration Number: DE 990916

For inquiries, please call our service hotline:
+49 (0)6083 287–87
Our service team can be reached as follows:
Monday – Thursday: 8:00 AM – 4:45 PM,
Friday: 8:00 AM – 12:30 PM

Canton (Canton Elektronik GmbH + Co. KG, Neugasse 21–23, 61276 Weilrod) provides the buyer (warranty holder) of passive, active, and semi-active speakers and electronics (hereinafter referred to as "Products") with a special manufacturer's warranty under the following conditions. For products from other manufacturers and brands purchased from Canton, the statutory warranty rights apply. In cases where other manufacturers offer their own warranties, claims under those warranties are only valid with those manufacturers and not with Canton:

General:

This warranty does not limit your statutory rights in the event of defects. You can avail yourself of these statutory rights free of charge. This warranty promise does not affect any existing statutory warranty rights you may have with your seller. If the purchased item is defective, you can always turn to your seller within the framework of statutory warranty, whether a warranty claim is made or not.

Territorial Scope:

The warranty provider grants this warranty if the product was purchased within the territory of the European Economic Area (EEA, which includes the countries of the European Union, Norway, Iceland, and Liechtenstein), Switzerland, and the United Kingdom.

Warranty Statement:

With the purchase of a product, the buyer, if they are an end consumer within the meaning of § 13 of the German Civil Code (BGB), receives a manufacturer's warranty from the warranty provider. It is guaranteed that the product is free from material and manufacturing defects. The warranty is granted for the following periods and starts from the date of purchase invoice of the device:

- 10 years for passive speakers of the current Reference series
- 10 years for passive speakers of the Reference-K series and Reference.2 series (with warranty extension)
- 5 years for other passive speakers
- 2 years for active and semi-active speakers, as well as electronics

Warranty Coverage:

Material and manufacturing defects in the purchased product will be rectified free of charge within a reasonable timeframe, either through repair or replacement of the item with an equivalent product. Replaced parts and devices become the property of the warranty provider. Other claims of the warranty holder under this warranty, especially claims for damages, are excluded.

Limitations of the Warranty:

Warranty claims are excluded for damages to the product caused by:

- External influences, such as transportation damage, impact or collision
- Improper or abusive handling
- Failure to observe safety precautions
- Normal wear and tear
- DIY repair attempts
- Environmental factors (heat, humidity, etc.)

Claiming the Warranty:

To assert a warranty claim, please contact the warranty provider:
Canton Elektronik GmbH + Co. KG
Neugasse 21–23, 61276 Weilrod
Phone: +49 (0)6083 287 0
Email: info@canton.de

Important Note:

To qualify for warranty service, the warranty provider must be allowed to inspect the warranty case by sending in the product. Therefore, it is essential to ensure that the product is well-packaged to prevent any damage during transportation. The invoice for the shipment of the product must be included when applying for warranty service. Without an invoice, the warranty provider may reject the warranty claim. In cases of valid warranty claims, the warranty handling is always free of charge. This means that the warranty provider will reimburse any shipping costs for sending the product. If a paid disassembly of the product is necessary for sending it to the warranty provider, the warranty provider covers the costs required for the disassembly. Personal data will be used solely for the purposes of order processing and possible warranty handling in accordance with applicable data protection laws.

As of January 18, 2024
Subject to technical modifications, errors, and printing mistakes.
You can find our general terms and conditions (GTC) on our website: <https://www.canton.de/en/information/terms-and-conditions/>

Bei Fragen oder Anregungen wenden Sie sich bitte an unseren Kundenservice:

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

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