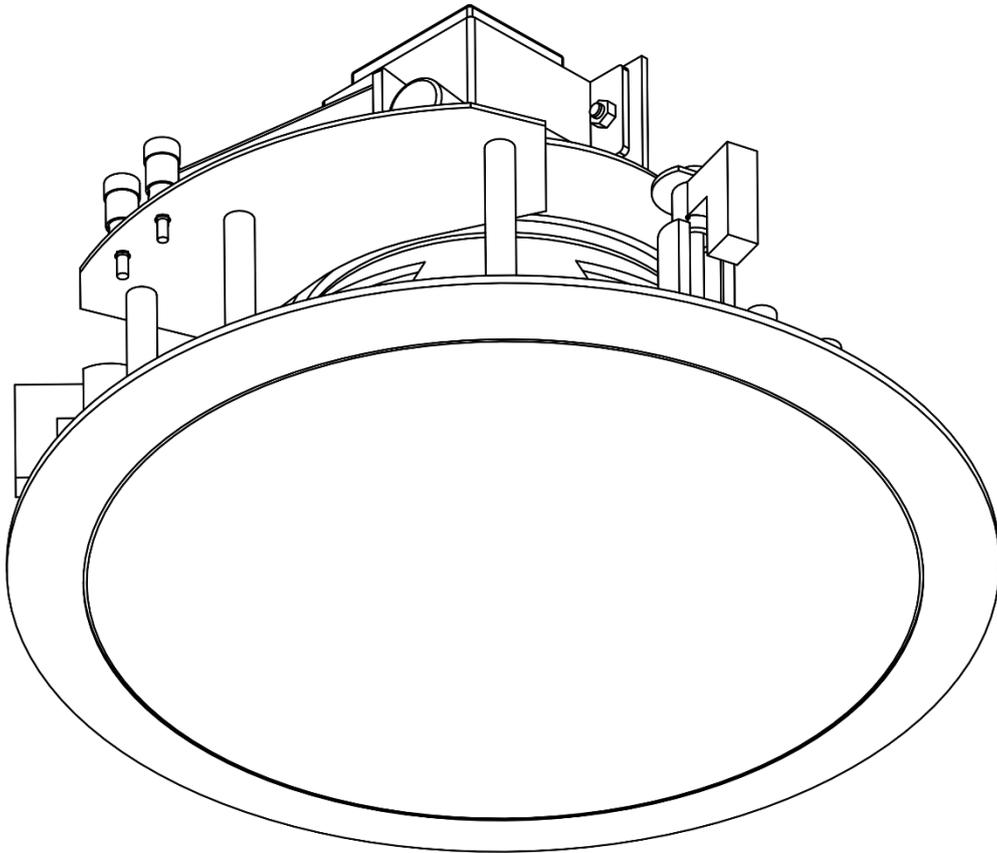




MANUAL



ENGLISH

CS-850S

V1

Order code: D6588

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Warning



**For your own safety, please read this user manual carefully
before your initial start-up!**

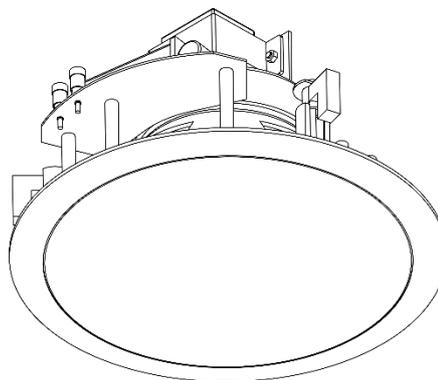


Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture will be returned in the original factory box and packing.

Your shipment includes:

- DAP Audio CS-850S 50W 8" in-ceiling subwoofer
- Template for in-ceiling mounting
- User manual



CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!



Safety Instructions

Every person involved with the installation, operation and maintenance of this system has to:

- be qualified
- follow the instructions of this manual



CAUTION! Be careful with your operations.
**With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!**



Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the system.

- Never remove warning or informative labels from the unit.
- Never leave any cables lying around.
- Do not open the device and do not modify the device.
- Only use device indoors, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Make sure you do not use the wrong kind of cables or defective cables.
- Extreme frequency boosts in connection with a high input signal level may lead to overdriving your equipment. Should this occur, it is necessary to reduce the input signal level.
- If system is dropped or struck, disconnect the power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your DAP Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your DAP Audio dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- Keep this manual for future reference.
- Clean only with dry cloth.
- When making the hole in your ceiling to mount the CS-850S, make sure there is sufficient clearance above the ceiling and there are no obstructions like A/C channels, power lines, etc.
- Take care of your speaker wires, they should be free of damage. Damaged speaker wires might result in poor sound quality and can damage amplifiers.
- Make sure the ceiling can support the speaker's weight.
- No main power shall be connected to the loudspeaker, doing so will damage the speaker.
- This device should only be serviced by qualified technician. If not, warranty might be void.
- Use cable of the right gauge, certainly for long runs.
- Use cables with clear color indication and maintain polarity throughout the whole system.
- Avoid loud feedback from microphones, this can damage your speaker.
- Please check the unit's condition after unpacking. If the outside of the carton box has been damaged, inform your shipper immediately.
- The user is responsible for correct positioning and operating of this product. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- **WARRANTY:** Till one year after date of purchase.

Operating Determinations

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious injuries and damage of property!



Return Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail offersales@highlite.com and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 01) Your name
- 02) Your address
- 03) Your phone number
- 04) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any shortcomings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

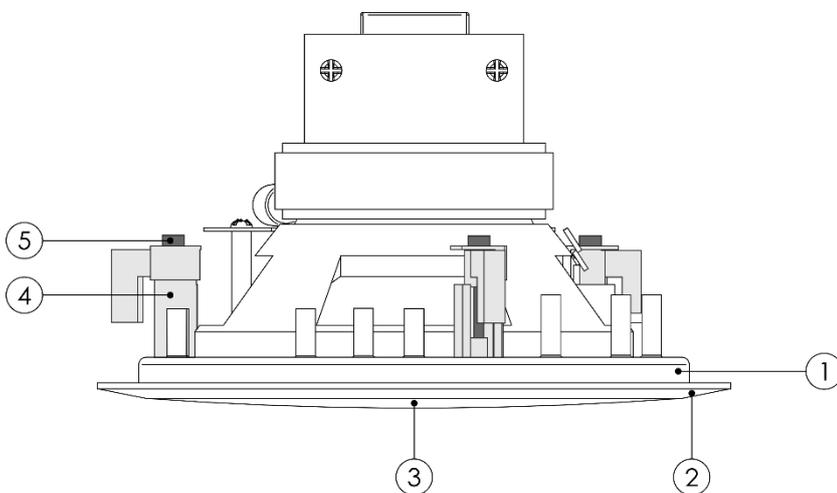
Description of the Device

Features

DAP CS-850S is an 8-inch in-ceiling subwoofer suited for public spaces. It can handle low frequencies in the range 28-200 Hz. It is equipped with a passive crossover that filters the high frequencies thus assuring low distortion. The crossover can be easily disconnected from the transformer using the push terminals, which allows the subwoofer to be connected to an external low impedance amplifier. The subwoofer features infinite baffle as it has no enclosure. The grill and the frame of the CS-850S can be painted to match any interior.

- Line voltage: 100 V
- Power taps: 70 V: 50 W red, 30 W brown, 15 W yellow, 5 W green, 3 W white, common = black
100 V: 50 W brown, 30 W yellow, 15 W green, 5 W white, common = black
- Impedance: 8 Ω
- Speaker size: 8 inch
- Frequency response: 28-200 Hz
- Sensitivity: 90 dB
- Material: ABS
- Color: white
- IP rating: IP20
- Mounting hole: \varnothing 230 mm
- Mounting depth: 180 mm
- Dimensions: 260 x 165 mm (D x H)
- Weight: 3 kg

Overview



- 01) Mounting frame
- 02) Bezel
- 03) Grill
- 04) 3 x Mounting clamps
- 05) 3 x Quick-turn mounting screws

Fig. 01

Installation

Before installing the DAP CS-850S, ensure that the chosen location on the ceiling is free of any obstructions such as pipe work, ducting or wiring. In existing constructions, if no crawlspace is available, use a stud-finding tool to map the ceiling construction and a pipe detector to scan the installation location. Avoid mounting the subwoofer in close proximity to in-ceiling lighting. This will help to reduce unwanted vibrations.

Switch off the electric power in the area where the speaker will be mounted prior to installation!

To install the DAP CS-850S, proceed as follows:

- 01) Remove the outer ring from the supplied cut out template. The inner ring of the template can be used to protect the speaker during painting.
- 02) Use the template to mark a cut line on the ceiling. Make sure the cut line has the correct diameter (230 mm).
- 03) Cut along the line with an appropriate tool to create a round hole in the ceiling. The flange of the speaker will cover any imperfections in the cut.
- 04) Pull the speaker cable down through the hole. Leave about 1,5 m spare cable to ease the connection of the speaker.
- 05) Rotate the **mounting clamps (04)** on the subwoofer counterclockwise and push them downwards to release them, as shown on Fig. 02 and 03.

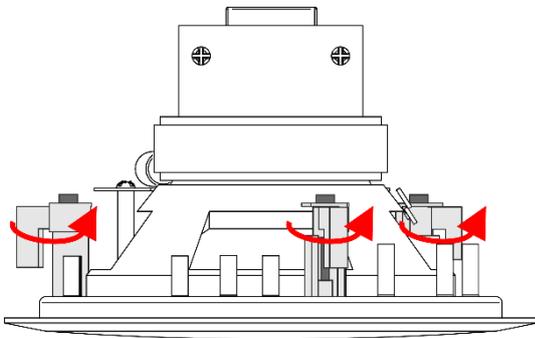


Fig. 02

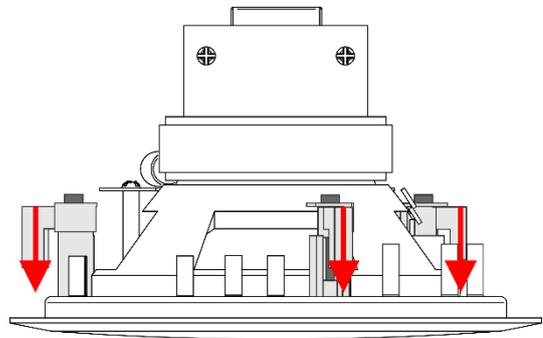


Fig. 03

- 06) Push the **quick-turn mounting screws (05)** on all **3 mounting clamps (04)** towards the back of the **grill (03)**, as shown on Fig. 04. The grill will come off.

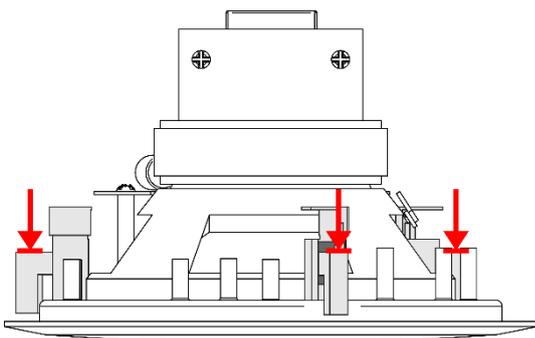


Fig. 04

- 07) Remove the **grill (03)**.
- 08) Connect the speaker cable to the wire terminals on the speaker. Make sure the speaker connection polarity is correct. See **Speaker Wiring** on page 7.

09) Lift the **mounting clamps (04)** and rotate them clockwise as shown on Fig. 05 and 06.

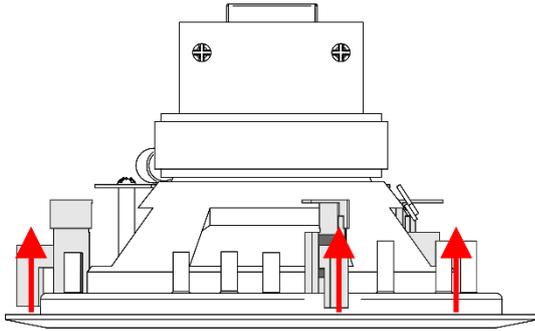


Fig. 05

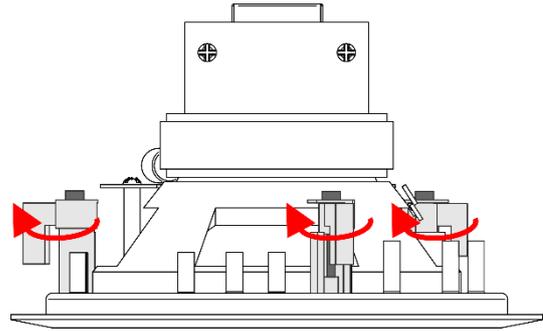


Fig. 06

- 10) Insert the speaker into the mounting hole. Make sure the flange of the **mounting frame (01)** is flush on the ceiling.
- 11) Use a Phillips 2 screwdriver to turn the **quick-turn screws (03)** slowly clockwise, as shown on Fig. 07. The **quick-turn screws (03)** will release the **mounting clamps (04)** and they will press the speaker against the ceiling, securing it into position.
- 12) Attach the **grill (03)** to the speaker by pushing it carefully into the **bezel (02)**, as shown on Fig. 08.

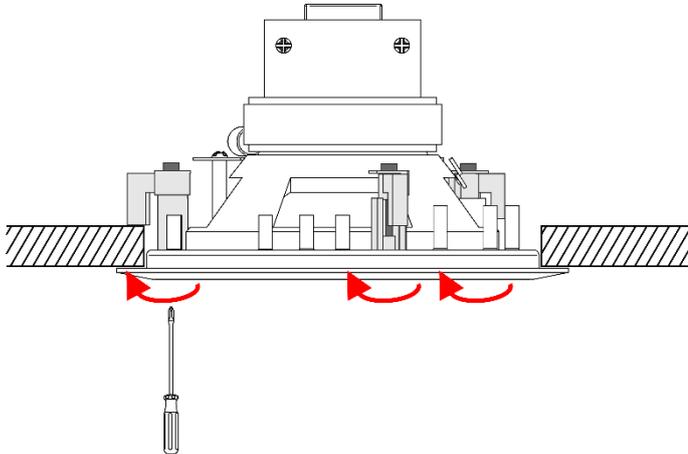


Fig. 07

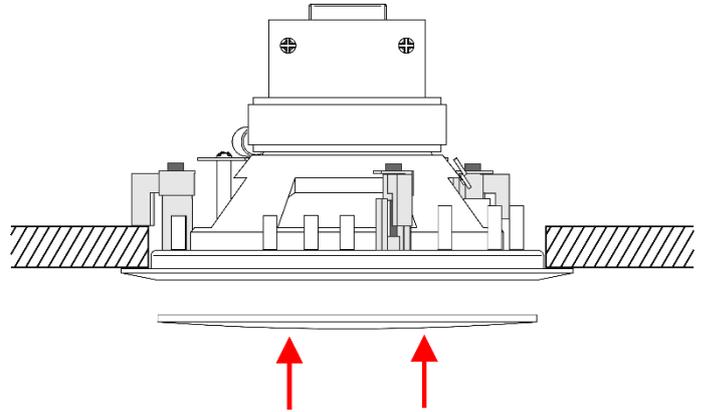


Fig. 08

Speaker Wiring

To achieve maximum performance from the subwoofer, it is recommended to use good quality CL2 or CL3 rated speaker cable. For distances bigger than 20 m, 14-gauge wire must be used. For shorter distances, 16-gauge or 18-gauge wire is sufficient.

Make sure the cable meets any local or national regulations.

Depending on the desired output, you can choose which wires of the subwoofer to connect to the speaker cable.

For 70 V speaker systems:

- red = 50 W, brown = 30 W, yellow = 15 W, green = 5 W, white = 3 W, black = common

For 100 V speaker systems:

- brown = 50 W, yellow = 30 W, green = 15 W, white = 5 W, black = common

Note: Make sure the speaker connection polarity is correct. Always connect positive to positive and negative to negative. In order to provide the best possible sound, all speakers in a system need to be wired with the same polarity. If the connections to one speaker in a system are reversed, this will result in loss of the low frequencies and will affect the overall performance of the system.

Painting the Grill

If you want to paint the frame and the grill to match the interior, you can use the inner ring of the cut out template to cover the speaker as protection.

Remove the grill before painting!

It is advisable to paint the frame before mounting the speaker in the ceiling, as it is difficult to remove the grill once the speaker is installed.

Remove the cloth from the inside of the grill before painting. Make sure you use spray paint. Lightly spray the front of the grill with the paint from a distance. Should any holes get clogged, use a can of compressed air to open them. Do not use brush or roller to paint the grill. Once the paint is dry, put the cloth back on the inside of the grill.

Troubleshooting

No Sound

Always check if all cables and cords are connected. Always turn off power to the area before checking the wires, to prevent electric shock.

If everything works properly and there is still no sound, consult the user manual to make sure the instructions were followed during installation. If everything was installed correctly and there is still no sound, you may want to consider having a professional take a look at your speakers.

Low and Poor Sound

If your ceiling speakers are working but the sound volume coming from them is low, check the speakers to see if they are well insulated. If the speakers were installed and there was no insulation around or behind them, you are going to want to add some. Adding insulation will help to buffer the sound and stop it from going up into your attic. It will also make sure that the speakers are secure in the holes and will not vibrate.

Uneven Sound

If you put the insulation unevenly, this could result in uneven sound. Make sure to put the same amount of insulation around each speaker. If some speakers are packed tightly, while others just have the insulation loosely around them, you will end up with different levels of sound absorption.

Sound Warping

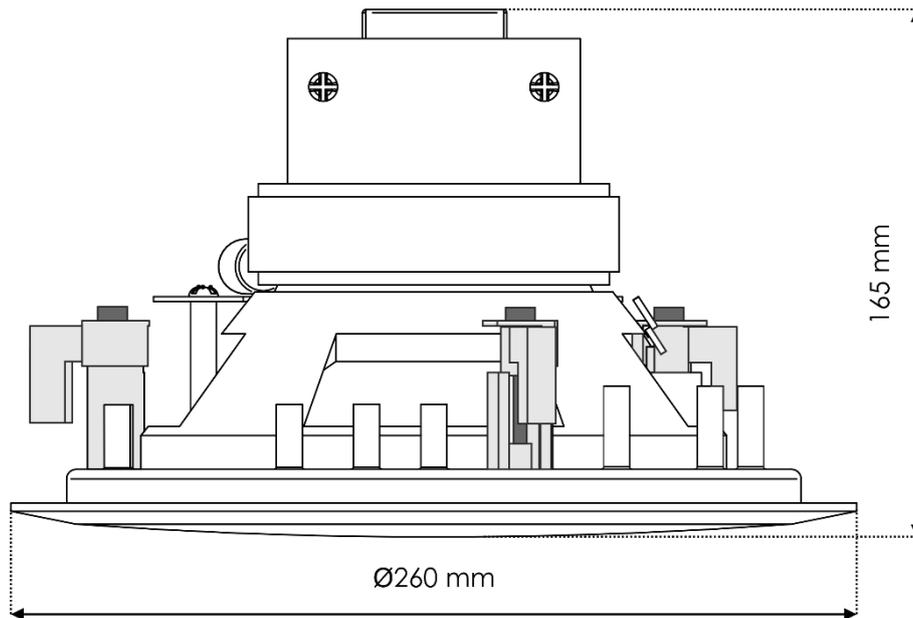
If the sound coming out of your ceiling speakers is loud enough, but seems to be warped or distorted, your treble or bass levels may need to be adjusted.

If there are not many pieces of furniture in the room and the floor has no carpet or rug, you will most likely have to set your treble to minus. With very little in the room to absorb the sound, too much treble can make the sound bounce off the fixtures in the room, making it sound tinny.

Product Specification

Model:	DAP Audio CS-850S
Line voltage:	100 V
Power taps:	70 V: 50 W red, 30 W brown, 15 W yellow, 5 W green, 3 W white, common = black 100 V: 50 W brown, 30 W yellow, 15 W green, 5 W white, common = black
Impedance:	8 Ω
Speaker size:	8 inch
Frequency response:	28-200 Hz
Sensitivity:	90 dB
Material:	ABS
Color:	White
IP rating:	IP40
Mounting hole:	\varnothing 230 mm
Mounting depth:	180 mm
Dimensions:	260 x 165 mm (D x H)
Weight:	3 kg

Dimensions



Design and product specifications are subject to change without prior notice.



Website: www.Dap-audio.info
Email: service@highlite.com



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