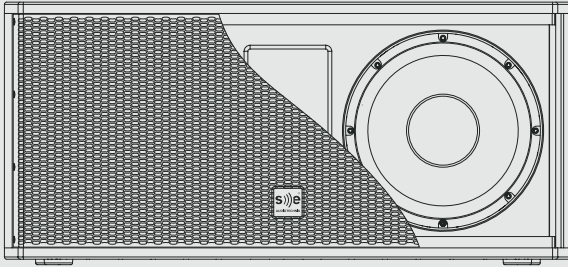




AUDIOTECHNIK

C6 SE

SELF-POWERED SUBWOOFER



MANUAL

THANK YOU FOR CHOOSING S)))e® AUDIOTECHNIK.

We are happy to be the solution for your sound reinforcement needs with our professional loudspeaker systems. The system you have purchased is based on more than 20 years of experience as a speaker manufacturer and more than 40 years as a speaker developer. It is the sum of German precision and Chinese efficiency that guarantees a high-quality and reliable SE AUDIOTECHNIK product.

Please, take the time to carefully read this manual and follow its instructions. It will allow you to get the most out of your product under safe operating conditions and suggest some care instructions leading to long-term endurance. Keep this manual in a safe place for further reference!

If you find any mistakes or have further questions or suggestions, please contact us at **info@se-audiotechnik.de**.

For more information about **SE AUDIOTECHNIK** products, visit our website **www.se-audiotechnik.de**. There you will also find the latest updates to manuals, firmware and technical documents for additional support.

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The content of this document is subject to change without prior notice to improve reliability, function, design or otherwise.

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IMPORTANT SAFETY INSTRUCTIONS

GRAPHICAL SYMBOLS IN THE PRODUCT



The lightning bolt triangle is used to alert the user to the risk of electric shock.



The exclamation point triangle is used to alert the user to important operating or maintenance procedures and instructions.



The CE mark indicates the conformity with the relevant EU directives for safety, health and environmental protection. See the *Manufacturer's Declaration* section.



The CCC mark indicates the conformity with the relevant Chinese directives for safety, health and environmental protection.



The RCM mark indicates the conformity with the relevant Australian and New Zealand requirements for electrical safety, EMC, EME and telecommunications compliance.



THE SGS certification mark indicates conformity with applicable American and Canadian standards.



Symbol indicating that the equipment is for indoor use only.



Symbol for conformity with Directive 2002/96/EC and Directive 2003/108/EC of the European Parliament, on waste electrical and electronic equipment (WEEE).

GRAPHICAL SYMBOLS IN THIS MANUAL



Symbol for important safety information related with the risk of electric shock.



Symbol to alert the user about important operating or maintenance instructions.



Symbol for important concepts and information for a better understanding of the functioning of the product.



Symbol for practical tips and ideas useful to ensure the correct use of the product and improve its operation.



Symbol for an interdiction, which you must follow.



Symbol for confirmation. Example or guide for secure and correct setup. Make sure that the result corresponds to what is described in this manual.

The products described in this manual have been engineered and manufactured to ensure your personal safety. However, **IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK, FIRE HAZARD AND OTHER HEALTH RISKS.** Always follow the basic precautions listed here to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following items in this chapter.



ELECTRICAL SAFETY PRECAUTIONS



DO NOT EXPOSE ANY OF THIS EQUIPMENT TO RAIN OR MOISTURE, DRIPPING OR SPLASHING LIQUIDS. OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT ATTEMPT TO OPEN ANY PART OF THE UNIT. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



EQUIPMENT DESCRIBED IN THIS MANUAL REQUIRE AC POWER SUPPLY. TO COMPLETELY DISCONNECT THEM FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE. THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

OVERHEATING PRECAUTIONS



DO NOT PLACE THIS PRODUCT IN DIRECT SUNLIGHT OR NEAR ANY HEAT SOURCE TO PREVENT OVERHEATING. PROTECTION MAY BE APPLIED AND POWER WILL BE REDUCED UNTIL THE TEMPERATURE RETURNS TO SAFE VALUES. THE SYSTEM MAY SHUT DOWN IF MAXIMUM OPERATING TEMPERATURE IS PERMANENTLY EXCEEDED. ALWAYS ENSURE PROPER AIR CIRCULATION AND PROVIDE SUFFICIENT SHADE. OVERHEATING MAY CAUSE DAMAGES AND LEADS TO POTENTIAL ELECTRICAL SHOCK, FIRE HAZARD AND OTHER HEALTH RISKS.

NOISE EXPOSURE PRECAUTIONS



PRODUCTS DESCRIBED IN THIS MANUAL CAN RADIATE HIGH SOUND PRESSURE LEVELS (SPL), WHICH CAN LEAD TO IRREVERSIBLE HEARING DAMAGE. SE AUDIOTECHNIK RECOMMENDS TO RESPECT THE TIMES OF EXPOSURE TO HIGH SPL.

Noise level (dBA)	85	94	97	112	127
Max. recommended exposure time per 24 hours	8 hrs.	1 hr.	30 min.	56 sec.	1 sec.

Noise exposure recommendations according to US National Institute for Occupational Safety and Health (NIOSH).

IMPORTANT SAFETY INSTRUCTIONS

- Keep these instructions and head all warnings.
- Read and Follow thoroughly all instructions.
- Use the product only for the purpose intended by the manufacturer.
- Use the product only if you are familiar with the product and its application.
- Observe applicable rules and regulations at the place of use.
- Do not use this apparatus near water.
- Clean only with a dry cloth. Disconnect the device from the AC outlet before cleaning. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.
- Do not block any ventilation openings.
- Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the grounding-type plug. A grounding-type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Use the mains plug to disconnect the apparatus from the mains.
- If the equipment has been exposed to strong fluctuations in temperature (for example, after transport), do not switch it on immediately. Moisture and condensation could damage the equipment.
- Keep away from objects which may be impaired by an external magnetic field. To avoid the damage of equipment such as computers, video monitors and magnetic data carriers, they should be located at least 1 meter away.
- Only use safety pins, attachments, accessories and adapters specified and/or provided by the manufacturer.
- Servicing must be done by qualified service personnel only. This is required when the product has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, power-supply cord and plug damages, the apparatus has been exposed to rain or moisture, does not operate as intended, or has been dropped.
- Do not insert your fingers, hands or any other objects into any gaps or openings of the device.
- When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and environment.

SPECIFIC SETUP & OPERATION SAFETY INSTRUCTIONS

1. This product is **NOT** intended to be suspended on chains or ropes.
2. Do **NOT** use handles or other methods to suspend the system, serious injuries can be the result!
3. Make sure that the equipment is installed securely and cannot fall down.
4. Do not cover the metal panel at the rear side of the subwoofer, as it serves as a heat sink for the system amplifier. Keep a minimum distance of 50 cm to any other object for sufficient airflow.

PACKAGE CONTENTS

The packaging of the **C6 SE SELF-POWERED SUBWOOFER** includes:

- 1 Subwoofer
- 1 AC power cord with powerCON® connector
- 1 Manual
- 1 QC PASS card
- 1 Warranty card

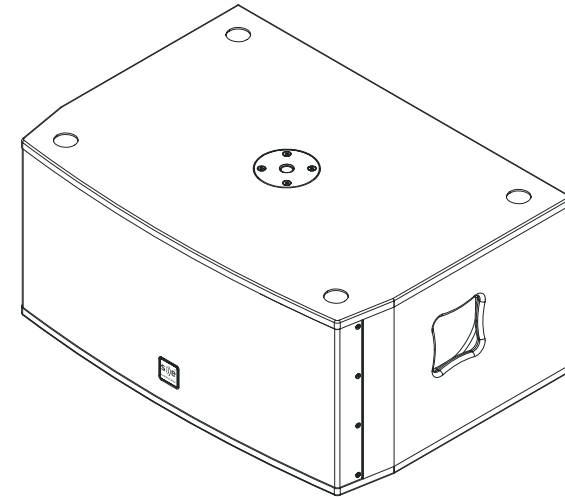


Figure 1. C-Line C6 SE

Please inspect your product packaging before unboxing it. If it has been damaged during shipping, unbox the product and check for any visual damage before using it. Notify the shipping company immediately and contact your SE AUDIOTECHNIK dealer or support center for help and assistance.

Finally, save the shipping carton as evidence for the possible claim, which can be requested only by you. We also recommend to keep all the packing materials and contents for transportation and storage.

INTRODUCTION

The **C6 SE** combines two high performance 10" woofers with an integrated amplifier and digital signal processor (DSP). This powerful subwoofer extends the self-powered C6 column system and provides additional low frequency energy down to 50 Hz. The provided recesses on the top side allow a secure positioning of the C6 system on the C6 SE subwoofer.

In standalone mode, the C6 SE subwoofer is also a bass enhancement for general speaker systems in mobile and install applications. For easy setup and implementation, C6 SE is equipped with a Line-Out connector, transferring the incoming signal from the Line-In and an adjustable low-pass and phase control.



Figure 2. C-Line C6 SE self-powered subwoofer and C6 SE self-powered column system.

FEATURES

- Self-powered subwoofer
- Plug & Play setup
- Dedicated C6 extension mode
- Standalone subwoofer mode with adjustable 4th order low pass crossover
- Suitable for PA, installation or monitor applications
- Elegant and unobtrusive design
- Digital signal processing

INTENDED USE

Professional plug and play subwoofer extension for indoor use with modular structure. Designed to enhance the C6 column system, but can be used with other 3rd party equipment as well. Ideal for mobile and install applications in medium sized venues with a few hundred listeners.

C6 SE ELEMENTS

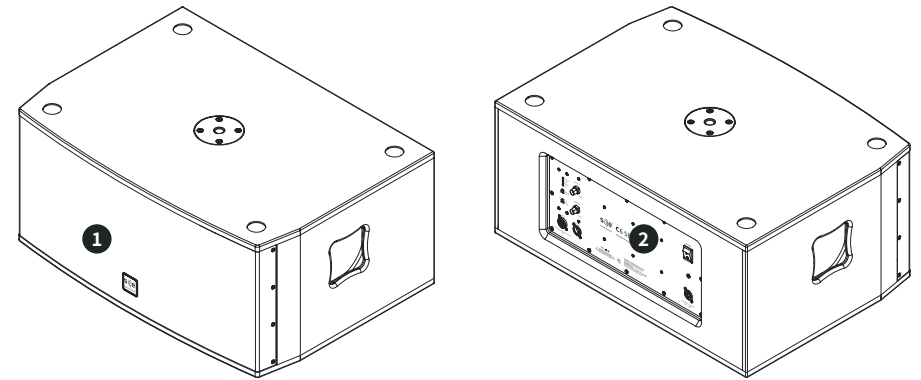


Figure 3. C-Line C6 SE element.

1

2x 10" Subwoofers

Symmetric bass-reflex design.

2

Built-in amplifier

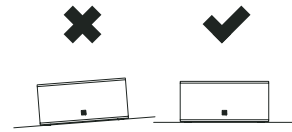
Audio inputs and audio outputs.
Level and crossover control.
System settings.
Class-D amplification with 48 kHz/24-bit DSP
and 800 W.

QUICK START GUIDE

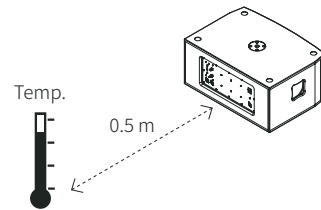
This guide briefly describes the main steps of setting up C6 self-powered column system.

PRECAUTIONS

The subwoofer of C6, as well as the subwoofer extension C6 SE must be placed on level ground, standing on its rubber feet.



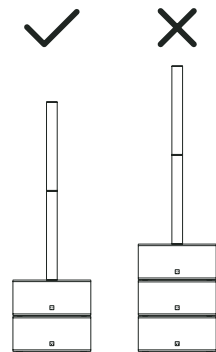
Ensure adequate cooling during operation with a minimum distance of 50 cm between the subwoofer's back panel and other objects such as walls.



Always turn on the C6 system last and turn it off first to avoid damaging the speakers.



Never assemble the system with other than the intended single subwoofer extension.



EXTENSION PLACEMENT

The ideal placement of your C6 SE subwoofer extension is right beneath the C6 column system. This way the column system's rubber feet perfectly fit the recesses on top of the bass extension maintaining stability. Depending on your application, you may also put the subwoofer extension to either side of the C6 system.

Placement option 1

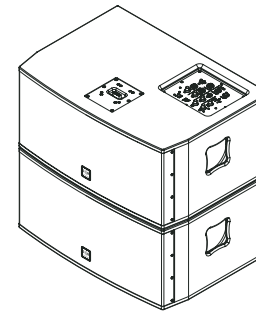


Figure 4a. C-Line C6 SE placement under C6 column system.

- 1 Place the C6 SE extension subwoofer at the desired location.
- 2 Place the C6 subwoofer of C6 column system on top of the C6 SE extension subwoofer. Ensure that the rubber feet of the C6 subwoofer fits into the recesses of the C6 SE extension subwoofer to maintain stability.
- 3 Assemble the C6 column system according to the instructions included in the C6 column system manual.



Do not place more than one C6 SE subwoofer extension under a C6 column system.

Placement option 2

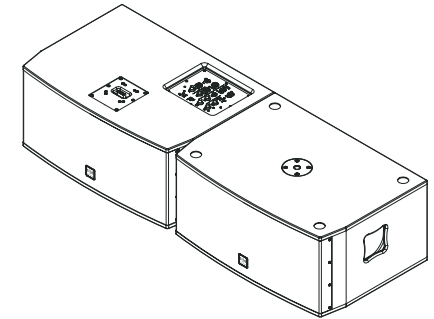


Figure 4b. C-Line C6 SE placement on side of C6 column system.

- 1 Place the C6 subwoofer of C6 column system at the desired location.
- 2 Assemble the C6 column system according to the instructions included in the C6 column system manual.
- 3 Place the C6 SE extension subwoofer on one side of the C6 subwoofer of the C6 column system.

USER INTERFACE

REAR PANEL: POWER SUPPLY

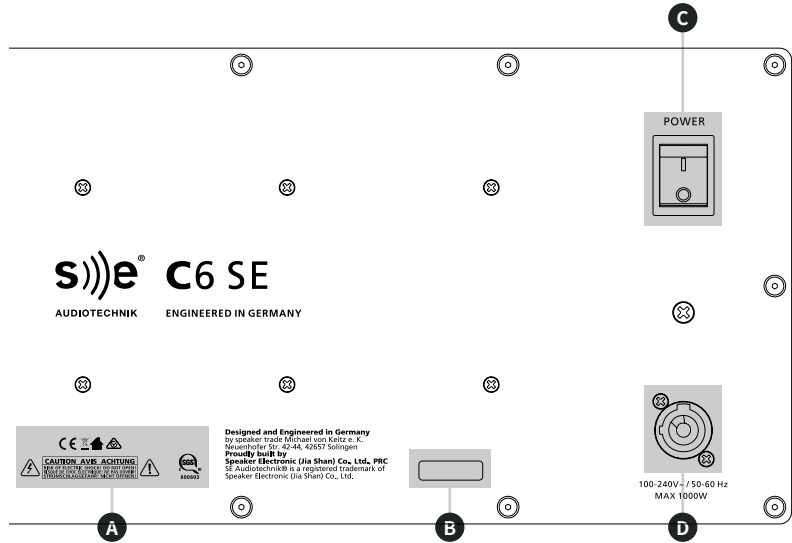


Figure 5. C-Line C6 SE rear panel.

A PRODUCT INFORMATION

(Explanations can be found in the symbol description at the beginning of this manual).

B PRODUCT SERIAL NUMBER

This code helps to identify your product. This code is also required for customer support.

C POWER SWITCH

Turns the system on/off.



D powerCON® SOCKET

Plug in the mains cable here. To lock the connector, twist it clockwise.

REAR PANEL: CONNECTIVITY AND CONTROLS

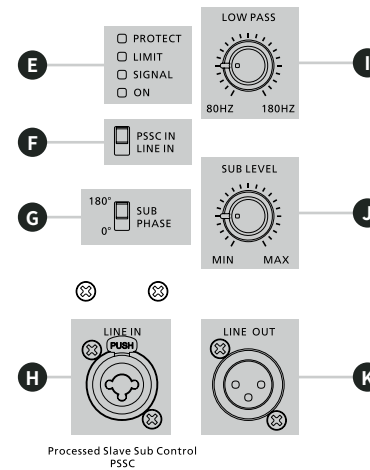


Figure 6. C-Line C6 control panel and connectivity.

E MAIN INDICATORS

PROTECT LED
Indicates that the system has shut down to protect its components from damage. The amplifier output is muted automatically.

LIMIT LED
Red color, indicates that the DSP limiter is working.

SIGNAL LED
Green color, flashes according to the input signal level.

ON LED
Green color, indicates that the system is turned on.

F DSP MODE TOGGLE

PSSC IN
(Processed Slave Sub Control)
Mode where C6 controls C6 SE. **SUB PHASE G**, **LOW PASS I** and **SUB LEVEL J** are disabled.

LINE IN
Standalone self-powered subwoofer mode.

G SUB PHASE

Switch the phase between 0° & 180° to match phase response when using C6 SE with other speaker systems.

H LINE IN

Connect to either C6 system's processed output "To C6 SE", or to any line level audio source.

I LOW PASS

Adjust the Low Pass Frequency, when in LINE IN DSP mode.

J SUB LEVEL

Adjust the Sub Level, when in LINE IN DSP mode.

K LINE OUT

Connect another C6 SE or any other 3rd party self-powered or external powered loudspeaker. The provided signal is received from the LINE IN input.

WIRING

C-Line self-powered systems use powerCON® connectors for the mains power. Figure 7 shows how to plug-in and connect these wires.

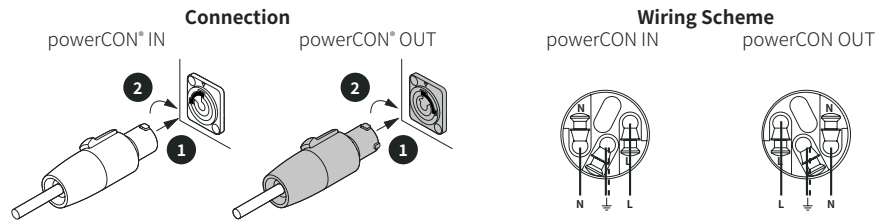


Figure 7. PowerCON® plug-in and wiring scheme.

- 1 Plug in the powerCON® cable connector into the powerCON® chassis connector.
- 2 Turn the powerCON® cable connector clockwise until it is locked.

Additionally, they use XLR-3 connectors to input and pass audio signals. They follow the plug-in and configuration scheme below:

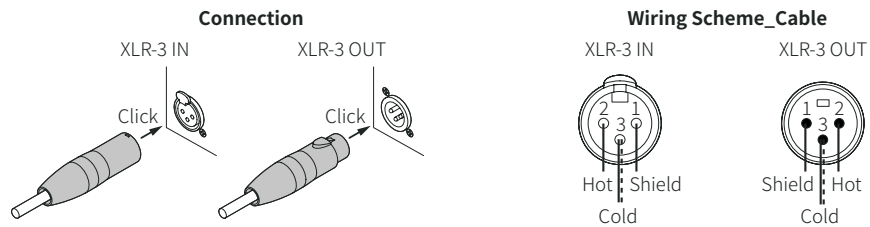


Figure 8. XLR-3 plug-in and wiring scheme.

C-Line self-powered systems are also equipped with COMBO-connectors for certain signal connections. These connectors consists of a combination of a TRS connector and a XLR-3 female connector. This enables you to use either a TRS-type cable or a XLR-type cable to connect to the input of the system.

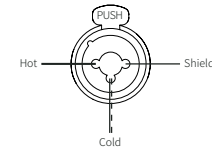


Figure 9a. COMBO-Connector (XLR + TRS).

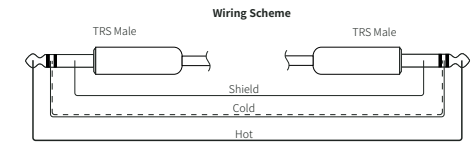


Figure 9b. TRS-type cable wiring scheme.

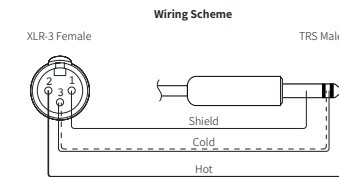


Figure 9c. TRS-type to XLR-type cable wiring scheme.

C6 SE SETUP

The C6 SE extension subwoofer can be seamlessly combined with a C6 column speaker system. This combination provides extended low frequency energy and simply enables C6 to have more bass and to play louder. Follow the steps outlined below to connect a C6 SE subwoofer to a C6 column system. If you use two C6 systems to build a stereo setup, add the second C6 SE subwoofer to the second C6 column system in the same way.

- 1 Place the C6 SE subwoofer at your desired location and put the C6 subwoofer on top of it. (see placement section)
- 2 Set the DSP mode of C6 SE extension subwoofer to **PSSC IN**.
- 3 Use an XLR cable and connect the **TO C6 SE** output socket on the C6's mixer to the **LINE IN** socket at the back panel of C6 SE.
- 4 Plug in the powerCON® cable into the **POWER IN** socket on each units' rear side panel and connect both cables to the mains outlet.
- 5 Place both column modules according to the instruction provided in the C6 column system manual to the corresponding connector on top of C6.
- 6 Connect your audio source/s to the C6 mixer.
- 7 Turn the **POWER SWITCH** of C6 on first and of C6 SE extension subwoofer second. The **ON LED** on each unit should indicate a constant green light.

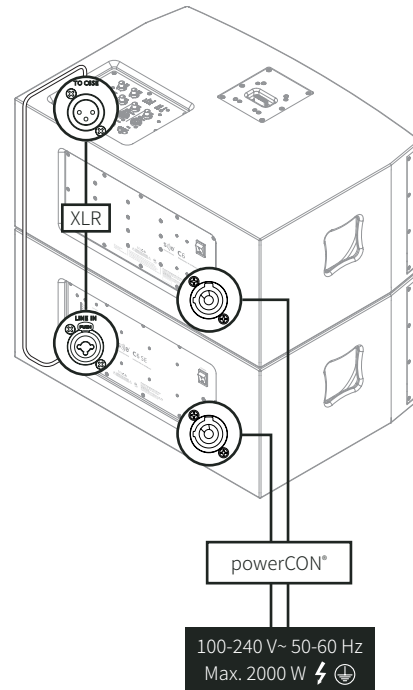


Figure 10. Connect C-Line C6 SE subwoofer to C6 column system.

SPECIFICATIONS

TECHNICAL SPECIFICATIONS

ACOUSTICAL	
Frequency range (-3 dB) ¹	50 Hz - 250 Hz
Coverage angles (-6 dB) [H x V]	Omnidirectional
Maximum Peak SPL ²	126 dB
System type	1-way, self-powered
Crossover frequency	250 Hz (C6 extension); 80 Hz - 180 Hz 4 th order low pass (standalone mode)
Transducers	2x 10" woofer with 2.5" voice coil
Enclosure type	Bass reflex
AMPLIFICATION	
Type	Class-D with SMPS
Output power ³	800 W
Protection	Short circuit, Overheating, Overcurrent, Limiter
Indicators	Power on, Signal, Limit, Protect
Connectors	Line In: 1x XLR combo jack, balanced Line Out: 1x XLR, balanced Power connector: powerCON® 20A
Wiring	Pin layout XLR: Pin 2: Signal+; Pin 3: Signal-; Pin 1: Shield Pin layout TRS: Tip: Signal+; Ring: Signal-; Shaft: Shield Pin layout powerCON®: Pin N: Neutral; Pin L: Conductor; Pin E: Earth, Ground
Operating voltage range	100 - 240 VAC, 50/60 Hz
Input sensitivity	0 dBu
DSP	48 kHz/24 bit with extended dynamics Processing latency: 1.1 ms
Processing	Crossover, Limiter, EQ, Level
User controls	Power: On/Off switch; 1x Subwoofer Level; 1x Lowpass Crossover; 1x Mode Switch (PSSC/Line In); 1x Sub Phase Switch 0°/180°
MECHANICAL	
Product dimensions [H x W x D] (Including rigging)	347 x 750 x 532 mm
Net weight	35.5 kg
Packaging dimensions [H x W x D]	433 x 830 x 615 mm
Total weight	38 kg
Cabinet	Subwoofer: Plywood
Cabinet finishing	Black polyurea coating
Grille	Powder coated perforated steel
Hardware	2 side handles embedded in cabinet; Rubber feet; recesses for C6 column system stacking
ACCESSORIES	
C6 TD	Transport Dolly for C6 or C6 SE
C6 FC	Flightcase for C6 or C6 SE

¹ Half space, 1 W / 1 m

² Calculated Max. Peak SPL = Sensitivity + 10log₁₀(output power)

³ According to EIA-426B Standard



Turn down the respective level when you plug in or unplug any audio signal cable. Always turn down the MAIN LEVEL before powering on or powering off C6 column system. This helps to prevent sudden loud sound exposure and possible hearing damages.

MECHANICAL DRAWINGS

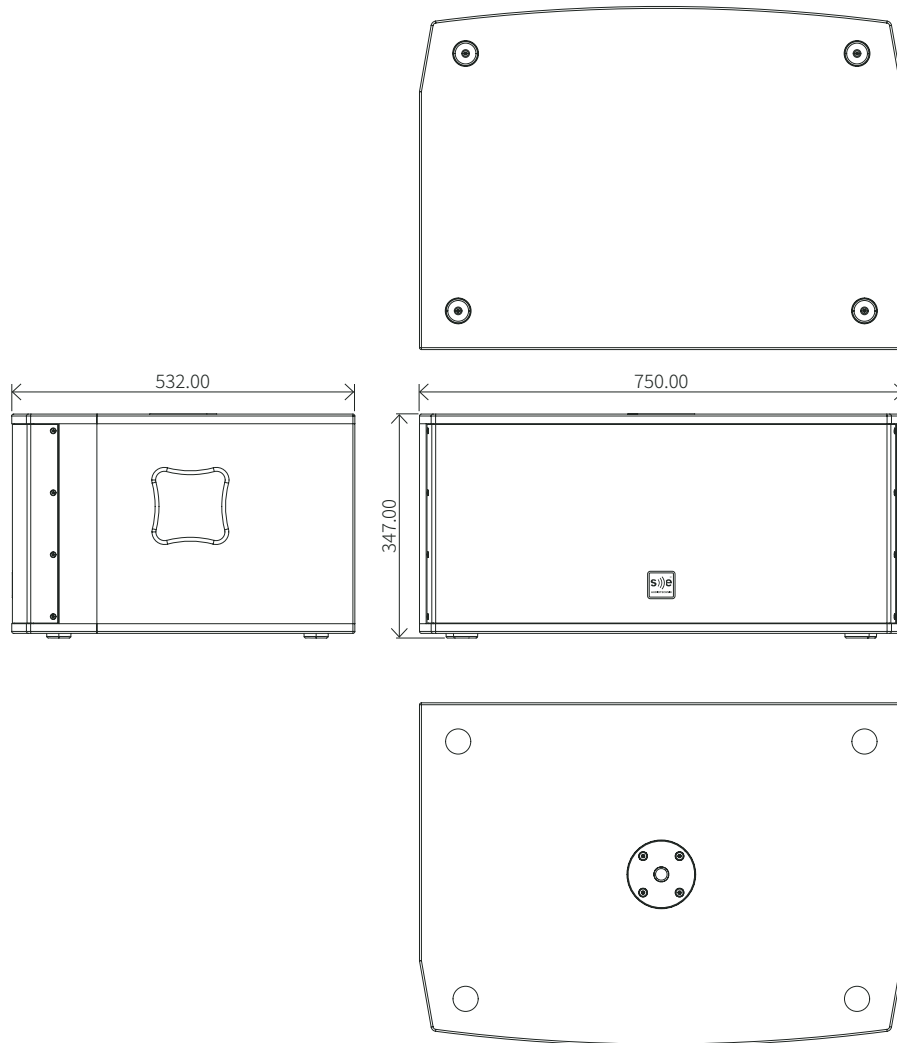


Figure 11. C-Line C6 SE self-powered subwoofer dimensions.

MANUFACTURER'S DECLARATIONS

WARRANTY

SE AUDIOTECHNIK gives a warranty of 4 years on SE AUDIOTECHNIK products. The warranty period begins with the purchasing date. The warranty applies to material or production defects that occur. Defective components or products will be repaired or replaced free of charge by SE AUDIOTECHNIK at its own sole and exclusive discretion during the warranty period.

NOTE

SE AUDIOTECHNIK does not guarantee the uninterrupted and fault-free operation of the products.

The warranty does not apply:

- For wear parts and natural abrasion.
- For damage, defects or malfunctions caused by improper use or use for other than the intended purpose.
- For damage, defects and malfunctions caused by the use of force or environmental conditions.
- For unauthorized repair efforts.

REQUESTING WARRANTY SERVICES

The request for warranty service can be submitted to SE AUDIOTECHNIK or to the dealer from whom the SE AUDIOTECHNIK products were purchased.

Contact details S)E AUDIOTECHNIK

SE AUDIOTECHNIK Head office
Neuenhofer Straße 42-44
42657 Solingen
Germany
Phone +49 212 382 26-0
E-Mail info@se-audiotechnik.de

In order to claim warranty service, you must provide proof of purchase and allow SE AUDIOTECHNIK to examine the warranty claim (e.g. sending in the products, examination at an authorized partner). Without proof of purchase, the provision of a warranty service can be rejected.

IMPORTANT NOTE

Your statutory warranty rights are not affected by this warranty. Furthermore, this warranty has no influence on any agreements you may have concluded with a dealer.

LIMITATION OF LIABILITIES

SE AUDIOTECHNIK is not liable for personal injury, material damage or claims resulting from inappropriate, dangerous or incorrect use of the products.

EU DECLARATION OF CONFORMITY

This device complies with the fundamental requirements and other relevant specifications of the directives of the European Union. The detailed declaration and the list of these directives and harmonized standards are provided on the website <https://se-audiotechnik.de/>. Included are all product variants, as long as they comply with the original technical design and have not been subsequently modified mechanically, electrically or in their original condition.

CORRECT DISPOSAL OF PRODUCTS (ELECTRICAL WASTE)

(Applicable in the European Union and other European countries with separate waste collection systems).

SE AUDIOTECHNIK products must not be disposed of with other waste at the end of their service life to avoid possible harm to the environment or human health.

Private users can contact either the dealer from whom they purchased the products or the local authority for information on environmentally friendly disposal. Commercial users can contact their supplier, if they have any questions about disposal.

DECLARATION ON WEEE POLICY

SE AUDIOTECHNIK products are designed and manufactured with high quality materials and components that are intended to be recyclable and/or reusable.

SE AUDIOTECHNIK is WEEE registered in accordance with WEEE policy.

LICENSES AND COPYRIGHT

SE AUDIOTECHNIK products may directly or indirectly contain software that is necessary or complementary for their use. These software components may be SE AUDIOTECHNIK own developments or licensed and open-source products and solutions or a combination of the mentioned. In the case of open-source licenses, SE AUDIOTECHNIK will provide a copy of the source code and the full text of the corresponding license upon request in accordance with the license terms. Excluded from this and protected by copyright are own and licensed software solutions and software components.

S)))E' AUDIOTECHNIK

HEAD OFFICE

Neuenhofer Strasse 42-44
42657 Solingen, Germany

info@se-audiotechnik.de

ASIA-PACIFIC DEVELOPMENT CENTER

No. 8 Development Zone Road
Huimin Sub-district, Jiashan County, Zhejiang, 314112, P.R. China

service@se-audiotechnik.com

www.se-audiotechnik.de



Designed in Germany

Version 2022/07

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