



▶ REK 3

REMOTE ELECTRONICS KIT 3

OPERATING MANUAL





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Important safety instructions

In this operating manual, the term “product” always refers to the entity of subwoofer electronics and REK 3.

1. Read these instructions and the subwoofer’s operating manual.
2. Keep these instructions. Always include these instructions and the subwoofer’s operating manual when passing the product on to third parties.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use the product near water.
6. Only clean the product when it is not connected to the mains power supply. Clean only with a dry cloth.
7. Always ensure a free air flow through the ventilation openings on the rear of the product. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. Always connect to a mains socket outlet with a protective earthing connector.
10. Protect the power supply cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits from the product.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/product combination to avoid injury from tip-over.
13. Unplug the subwoofer electronics during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, when the product has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. To completely disconnect the product from the AC mains, disconnect the power supply cord plug from the AC receptacle.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.
17. Do not expose the product to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the product.
18. The mains plug of the power supply cord shall remain readily accessible.



The label shown on the right is attached to the terminal side of the subwoofer electronics.



The symbols on this label have the following meaning:

Presence of uninsulated dangerous voltage within the subwoofer electronics that may be of sufficient magnitude to constitute a risk of electric shock.



There is a risk of electric shock if you touch current-carrying parts. Refer servicing to your Neumann service partner.



Read and follow the safety and operating instructions contained in the subwoofer’s operating manual and in this operating manual.





Installation

- Ensure that the room in which you use this product is wired in accordance with the local electrical code and checked by a qualified inspector.
- Only use the product indoors.
- Do not install the product in hot, humid, or excessively dusty locations, in direct sunlight or in locations where it is exposed to externally generated vibrations.
- Do not place burning objects (e.g. candles) on top of or near the product.
- If condensation has formed on the product, e.g. because it was moved from a cold environment to a warm one, allow the product to acclimatize to room temperature before using it.
- Do not overload wall outlets and extension cables as this may result in fire and electric shock.

Intended use

Intended use of the product includes:

- having read the subwoofer's operating manual, this operating manual and especially the chapters "Important safety instructions" in both operating manuals,
- using the product within the operating conditions and limitations described in the subwoofer's operating manual and in this operating manual.

"Improper use" means using the product

- other than as described in the above mentioned operating manuals, or
- under operating conditions which differ from those described in the operating manuals.

This will invalidate the guarantee.



Note that imperial dimensions are approximate.



The REK 3 remote electronics kit

Thank you for purchasing a Neumann REK 3 remote electronics kit. This Neumann accessory is designed to compliment Neumann's extensive range of monitors.

The Neumann mounting hardware range gives increased signal interconnectivity and mounting flexibility, for the cabinets and the electronics. The philosophy of the mounting hardware range is to provide the parts required to mount the loudspeakers onto commonly available third-party mounting products.

The REK 3 allows active subwoofer electronics panels to be located up to 30 m (90') away from the subwoofer cabinet. This has the following advantages when subwoofers are flush mounted:

- No heat dissipation problems
- Easy adjustment of the controls
- Easier servicing of the electronics
- Shorter cable runs

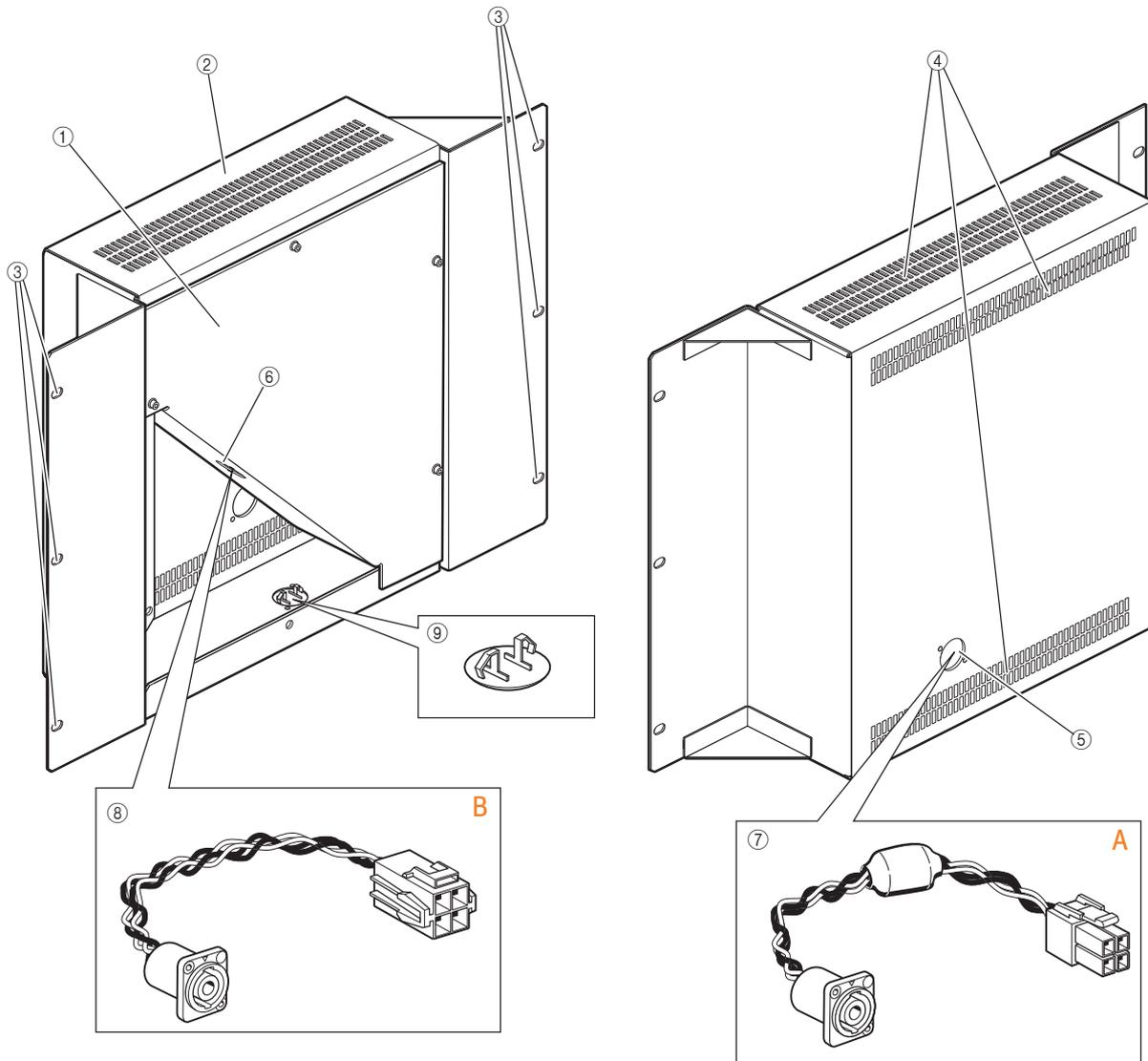
A cable terminated with a 4-pole Speakon connector carries the driver signal(s). Significant additional space is not required behind the chassis if you choose to mount the connector on the bottom panel (see page 7).

Package contents

- 1 REK 3 subwoofer electronics' chassis
- 1 REK 3 cover plate for subwoofer
- 6 Torx screws M5x12, black, 4 pre-mounted to the cover plate
- 1 Cable **A** with Neutrik Speakon NL4MP chassis connector and 4-pole plug, for connection of the REK 3 chassis to the subwoofer electronics; 1 ferrite core pre-mounted; Speakon chassis connector pre-mounted to the rear of the chassis ②
- 1 Cable **B** with Neutrik Speakon NL4MP chassis connector and 4-pole socket, for connection of the REK 3 cover plate to the subwoofer
- 1 Ferrite core, needs to be installed when a subwoofer with 2 drivers is used (see page 9)
- 4 PT screws 3x10 mm, black
- 1 Socket cover cap Ø 32.5 mm, mounted to the cover plate
- 1 Operating manual

 Neumann RC cables in lengths of 2, 5, 10, 15, 20, 25 and 30 m are available as optional accessories (see page <ÜS>). Neumann RC cables are constructed of flame-retardant materials and have very robust high quality metal connectors. The pin assignment of the RC cables can be found on page 12. Third party cables can also be used.

Product overview



- ① REK 3 cover plate for subwoofer
- ② REK 3 subwoofer electronics' chassis
- ③ Holes for mounting the REK 3 (also compatible with 19" racking)
- ④ Ventilation openings
- ⑤ Hole for mounting the Speakon NL4MP chassis connector to the REK 3 chassis
- ⑥ Hole for mounting the Speakon NL4MP chassis connector to the REK 3 cover plate
- ⑦ Cable A with Neutrik Speakon NL4MP chassis connector and 4-pole plug
- ⑧ Cable B with Neutrik Speakon NL4MP chassis connector and 4-pole socket
- ⑨ Socket cover cap \varnothing 32.5 mm

Installing the REK 3



CAUTION

Danger of injury and material damage if the product is not installed by a specialist!

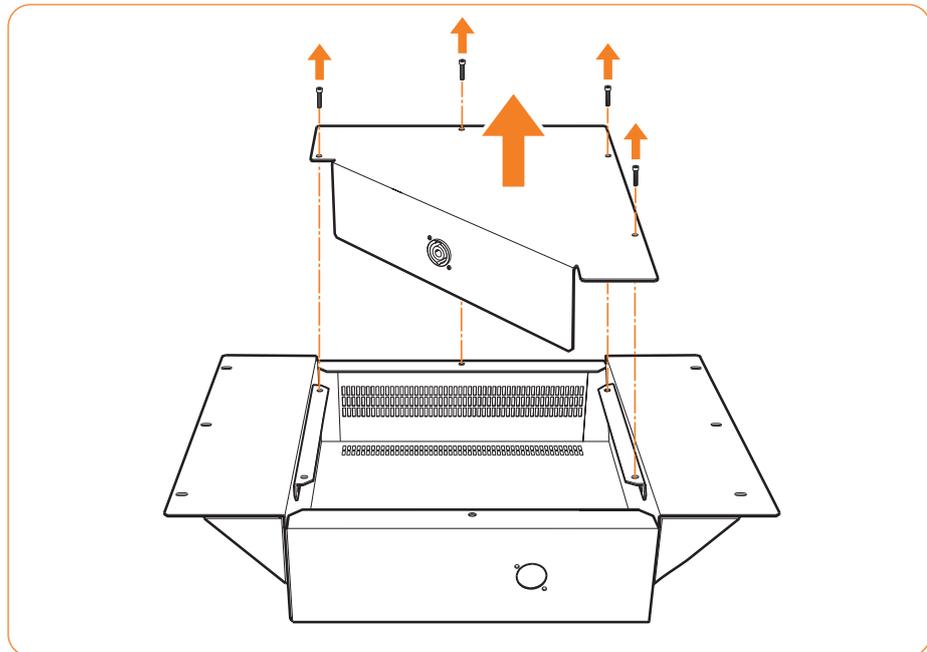
If the installation is not carried out by a specialist, the danger of injury and material damage is increased.

- ▶ The installation has to be carried out by a specialist according to local, national and international regulations and standards.

Due to his/her technical training, know-how and experience as well as knowledge of relevant provisions, regulations and standards, the specialist must be able to assess assigned tasks, recognize potential hazards and ensure appropriate safety measures. The following safety and mounting instructions are addressed to this specialist.

- ▶ Switch off the subwoofer, then disconnect the mains cable and all signal cables (see the operating manual of the subwoofer).
- ▶ Wait at least 10 minutes until all capacitors of the subwoofer electronics have fully discharged.
- ▶ Place the REK 3 horizontally on a sturdy, flat surface, as shown below.
- ▶ Unscrew and remove the 4 screws and then lift the cover plate ① from the REK 3 chassis ②.

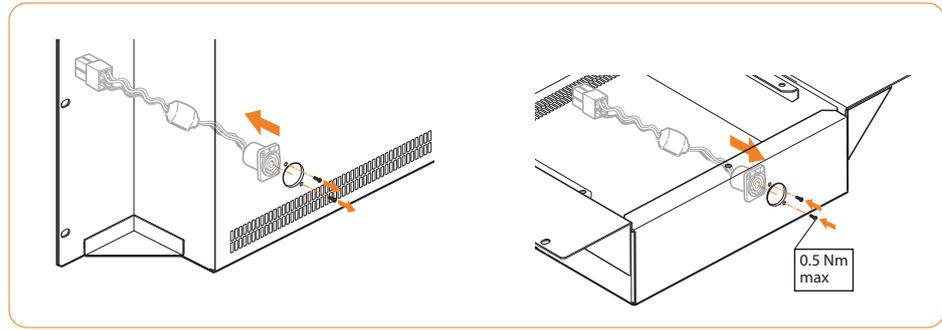
Removing the cover plate ①



Keep the screws. You will need them later to attach the subwoofer electronics to the REK 3 chassis ②.

Mounting the cable A

The chassis connector of cable A ⑦ is pre-mounted on the rear panel of the chassis ②. If you want to mount the chassis connector on the bottom panel of the chassis ②, detach it and mount it there.

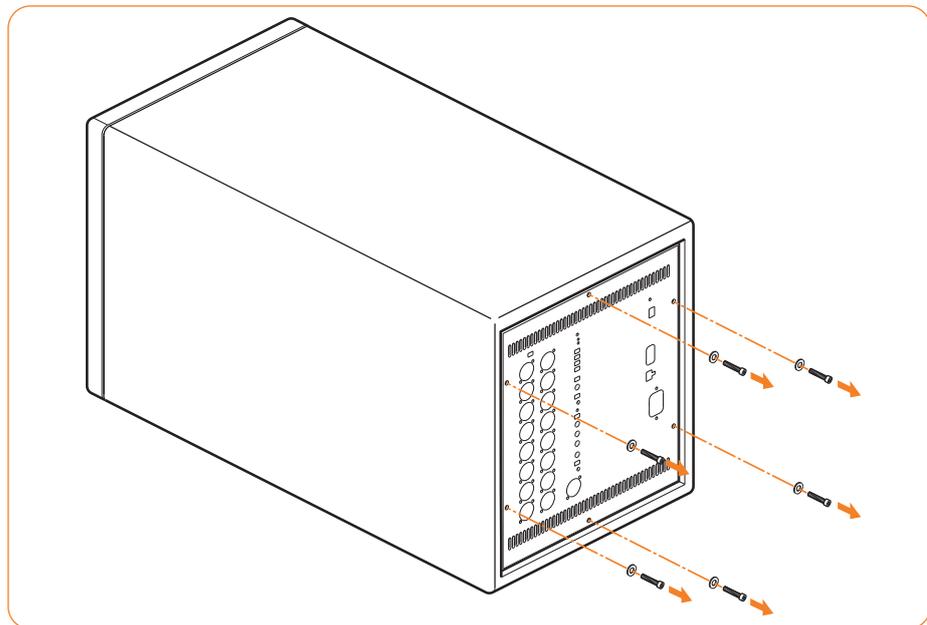


- Observe the space required behind or below the REK 3 for the RC cables:

Chassis connector of cable A ⑦ mounted	Space required for the RC cables
... on the rear panel	at least 12 cm (5") behind the chassis ②
... on the bottom panel	at least 12 cm (5") below the chassis ②

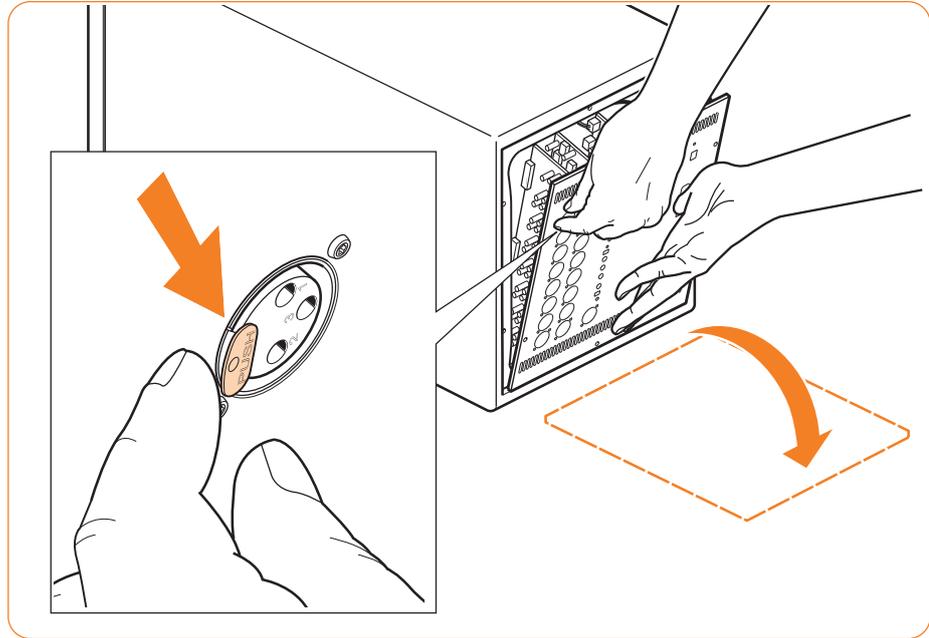
i Keep in mind to always maintain an air gap of at least 5 cm (2") around the chassis' backplate ② to ensure sufficient ventilation of the subwoofer electronics (see page 10).

- Unscrewing the subwoofer electronics**
- Place the subwoofer on a sturdy, flat surface. The surface must be large enough so that the subwoofer electronics can be hinged down and placed on the surface behind the subwoofer cabinet.
 - Unscrew and remove the 6 screws and washers highlighted in the figure below.

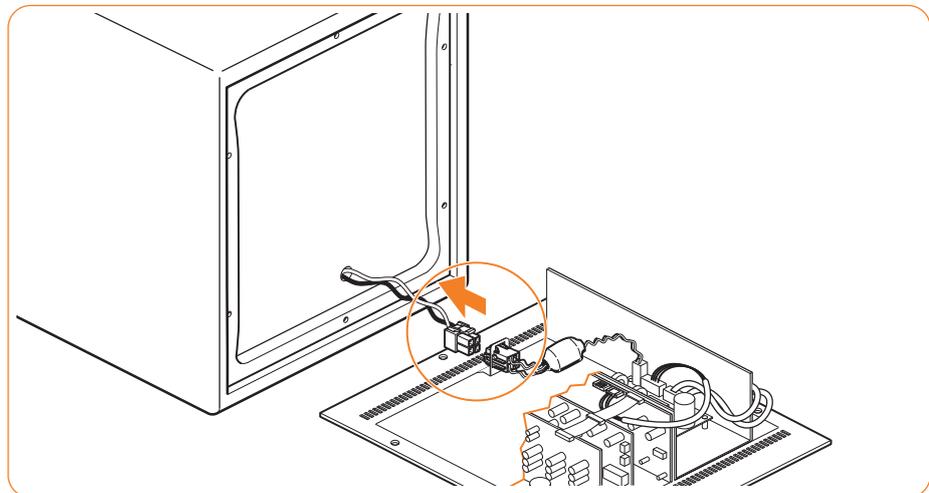


i Keep 4 of the screws and washers. You will need them later to attach the cover plate ① to the subwoofer.

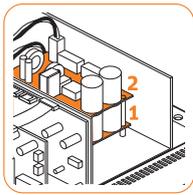
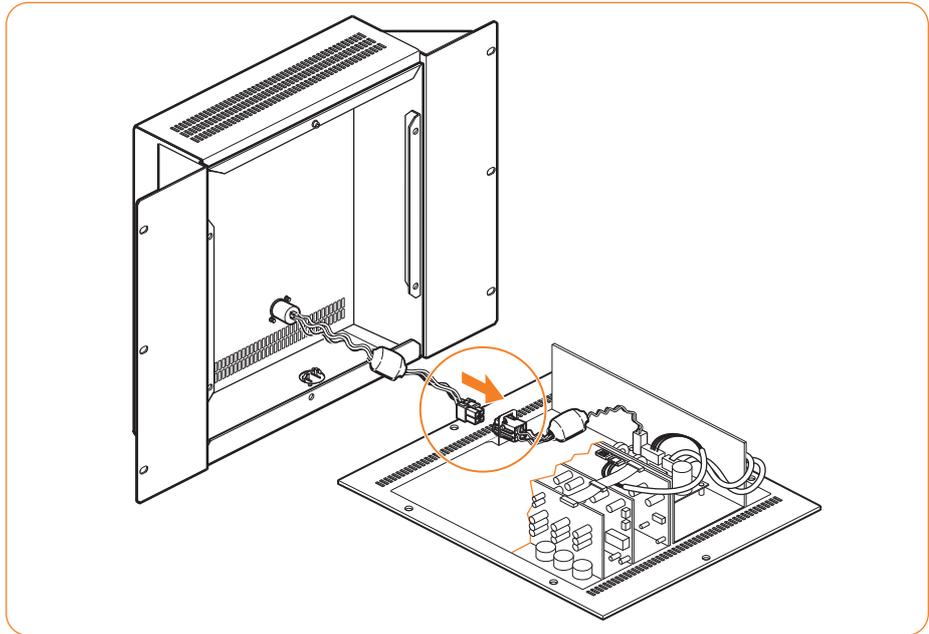
- ▶ With one hand on the bottom edge of the subwoofer electronics, hinge down the subwoofer electronics (see figure).
- ▶ Place the subwoofer electronics on the surface.



- ▶ Unplug the driver cable from the subwoofer electronics, as shown below.

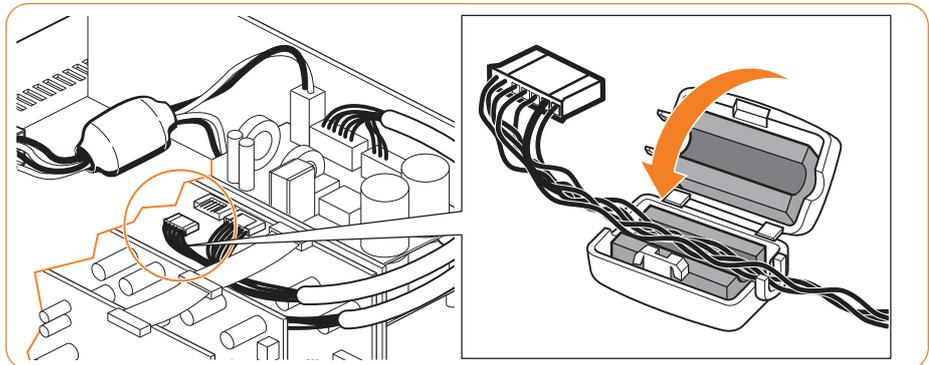
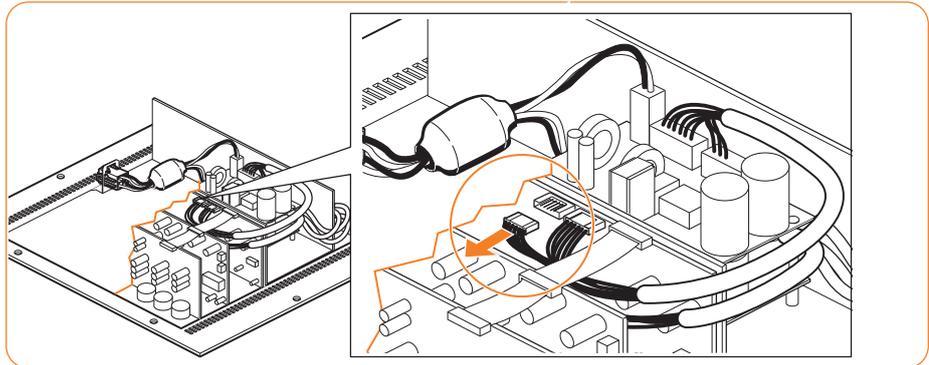


- ▶ Set up the REK 3 chassis ② and place the subwoofer electronics in front of it, as shown on page 9.
- ▶ Connect the subwoofer electronics and cable A by plugging the 4-pole plug of the cable into the 4-pole socket of the subwoofer electronics (see figure).

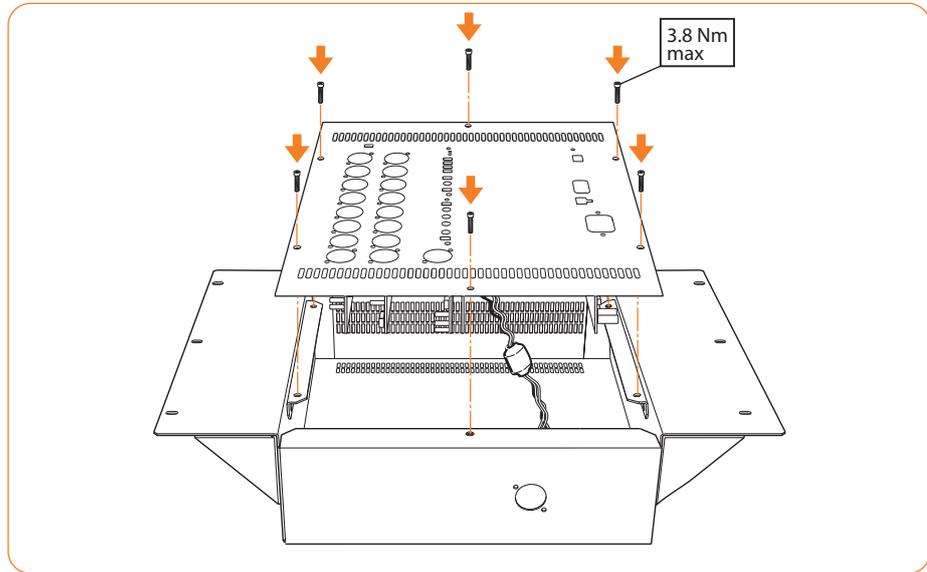


If you are using a subwoofer with 2 drivers:

- ▶ Install the ferrite core, as shown below. Install it as close as possible to the connector of the cable.



- ▶ Insert the subwoofer electronics into the REK 3 chassis ②, as shown below.
- ▶ Insert the 6 torx screws (supplied) and fix the subwoofer electronics to the REK 3.



CAUTION
 Danger of injury and material damage due to dropping of the product!

If the product is dropped, damage to objects or injury to persons as well as damage to the product itself may occur.

- ▶ Do not place this product on unstable platforms, carts, stands, tables or mounting equipment.
- ▶ Always screw the product tight. Use all 6 mounting points ③.

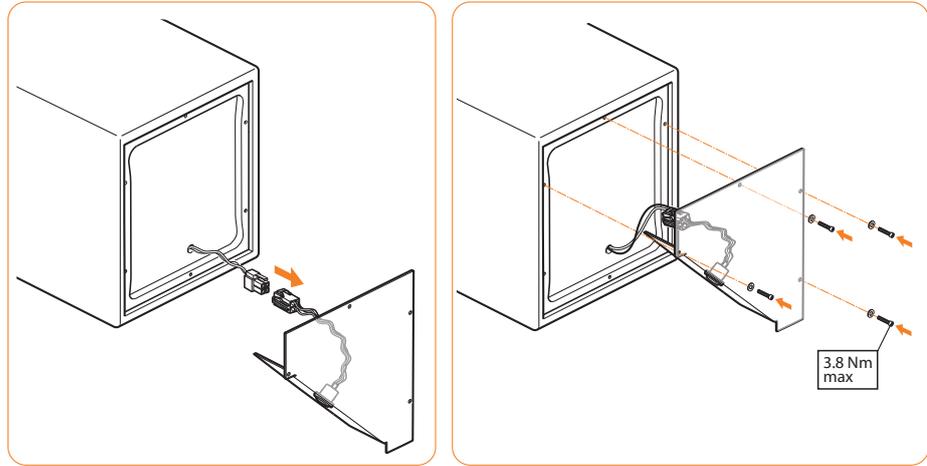
CAUTION
 Damage to the product due to overheating!

If air cannot circulate properly through the ventilation openings ④ on the rear of the chassis ②, the power amplifiers of the subwoofer may overheat leading to premature activation of the thermal protection system which limits the maximum output level of the subwoofer. In rare cases, damage to the product may also occur.

- ▶ Never cover the ventilation openings ④.
- ▶ When installing the product into tight spaces such as wall recesses, maintain an air gap of at least 5 cm (2") around the chassis's backplate ② to ensure a free air flow through the ventilation openings.

- ▶ Mount the chassis ② ...
 - into a 19" rack
 - or
 - in a different location, e.g. on wooden batons attached to a wall or in a wall recess.

- ▶ Hold the cover plate ① in front of the subwoofer's electronics recess and connect the connection cable subwoofer/subwoofer electronics to the 4-pole socket of cable B ⑧.
- ▶ Use the supplied screws to fix the cover plate to the subwoofer, as shown below.



- ▶ Place the subwoofer in the desired location and connect the Neutrik Speakon NL4MP chassis connector of the chassis ② and the cover plate ① to an RC cable (optional accessory).
- ▶ Connect the signal cables and the mains cable to the subwoofer electronics.
- ▶ Switch on the subwoofer and check the function of the drivers.

Cleaning and maintaining the REK 3

CAUTION

Damage to the product caused by liquids!

Liquids entering the product can cause a short-circuit in the subwoofer electronics and damage or even destroy it.

- ▶ Keep all liquids away from the product.
- ▶ Before cleaning, disconnect the product from the mains power supply.
- ▶ Use a soft, dry, and lint-free cloth to clean the product.

Specifications

Subwoofer electronics' chassis ②	
Height	343 mm (13 1/2") – 8 U
Width	482 mm (19")
Depth	100 mm (4")
Weight	3.6 kg (7.9 lbs), without subwoofer electronics
Color	black (RAL 9005)
Material	steel



Cover plate for subwoofer ①	
Height	319 mm (12 1/2")
Width	289 mm (11 3/8")
Depth	80 mm (3 1/8")
Weight	1 kg (2.2 lbs)
Color	black (RAL 9005)
Material	steel

Connectors	
Subwoofer	Neutrik Speakon NL4MD-H, 4 pole connector

Pin assignment of the RC remote control cable

Driver	Speakon pins
Bass 1	1 +/-
Bass 2	2 +/-

i “Bass 2” is not used when there is only one bass driver in the cabinet.

Cross-section of the loudspeaker cables

Cable length	Cable cross-section
< 20 m	2.5 mm ² (14 AWG)
> 20 m	4.0 mm ² (12 AWG)

Accessories

Product	Description
RC 2	Remote control cable, 2 m (6')
RC 5	Remote control cable, 5 m (15')
RC 10	Remote control cable, 10 m (30')
RC 15	Remote control cable, 15 m (45')
RC 20	Remote control cable, 20 m (60')
RC 25	Remote control cable, 25 m (75')
RC 30	Remote control cable, 30 m (90')

Manufacturer Declarations

Guarantee

For the current terms and conditions of the product guarantee please visit www.neumann.com.

CE Declaration of Conformity

After the installation of a subwoofer electronics suitable for use with the REK 3, the REK 3 is in compliance with the essential requirements of the EMC Directive (2004/108/EC) and of the Low Voltage Directive (2006/95/EC). The CE Declaration of Conformity of the subwoofer is valid.

The Manufacturer Declarations are available on the product page at www.neumann.com

