▸ SEA 1

Subwoofer Ethercon Adapter

Operating Manual

Contents

Important safety instructions

- Read this operating manual.
- Keep this operating manual. Always include this operating manual when passing the product on to third parties.
- Heed all warnings.
- Follow all instructions.
- Do not use the product near water.
- Before cleaning the product, disconnect it from other products that are connected to the mains power supply. Clean only with a dry cloth.
- Install the product in accordance with the instructions contained in this operating manual.
- Do not operate the product near any heat sources such as radiators, stoves, or other devices (including amplifiers) that produce heat.
- Only use attachments/accessories specified by Neumann.
- Disconnect the product from other products that are connected to the mains power supply during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required if the product has been damaged in any way, liquid has been spilled, objects have fallen inside, the product has been exposed to rain or moisture, does not operate properly or has been dropped.
- WARNING: To reduce the risk of fire and electric shock, do not expose the product to rain or moisture.
- 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.

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.

Intended use

Intended use of the product includes:

- having read this operating manual and especially the chapter „Important safety instructions",
- using the product within the operatig conditions and limitations described in this operating manual.

„Improper use" means using the product:

- other than as described in this operating manual, or
- under operating conditions which differ from those described herein.

This will invalidate the guarantee.

The SEA 1 subwoofer EtherCon adapter

Thank you for purchasing a Neumann SEA 1 subwoofer EtherCon adapter. This Neumann accessory is designed to compliment Neumann's extensive range of studio monitors.

The Neumann mounting hardware range gives increased signal interconnectivity and mounting flexibility, for the cabinets and the electronics.

About the SEA 1

In multiple subwoofer systems, control signals, such as volume control signals, must be transmitted to all subwoofers to ensure that they all deliver the volume set for the whole system.

The SEA 1 subwoofer EtherCon adapter facilitates the connection of several subwoofers to a single NRC 1 or NRC 2 remote control or to any RS-232 data source.

The subwoofer EtherCon adapter is a small black aluminum box with 4 Neutrik EtherCon® sockets. One SEA 1 can serve as a control data hub for up to 3 subwoofers. For larger systems, several SEA 1 can be used. The SEA 1 is compatible with Neumann RC cables or standard CAT5 cables.

Instructions on controlling the volume and other functions can be found in the operating manual of the corresponding remote control and in the „Control Protocol" document available on the subwoofer pages at www.neumann.com.

Package contents

1 SEA 1 subwoofer EtherCon adapter
1 Operating manual

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| i | Note that imperial dimensions are approximate. |

Product overview

① SUBWOOFER 2 socket or next SEA 1
② SUBWOOFER 3 socket
③ SUBWOOFER 1 socket
④ Socket for Neumann NRC 1/2 remote control or RS-232 source or previous SEA 1

Using the SEA 1

> ⚠ **WARNING**
> Danger of hearing damage due to sudden high sound pressure levels!

Audio signals that are present at switch-on of a subwoofer or that can be present during operation, can create sudden, very high sound pressure levels which can damage your hearing.

▶ Always lower the output level of the audio source and set the volume control of your remote control to a low level **before** connecting the remote control to the subwoofer, either directly or via an SEA 1, or **before** starting the audio source (pressing "play").

If – with an audio signal present – you remove the Neumann NRC 1 remote control while the switch VOLUME CONTROL of the subwoofer is set to „VOLUME CONTROL" or you set the switch VOLUME CONTROL to „DISABLE" while the Neumann NRC 1 remote control is connected, the system output level is immediately set to O dB. This can create sudden, very high sound pressure levels which can damage your hearing.

▶ Always lower the output level of the audio source **before** removing a Neumann NRC 1 remote control, either directly connected or via an SEA 1, or – with the NRC 1 remote control connected – **before** setting the switch VOLUME CONTROL of the subwoofer to "DISABLE".

CAUTION
Material damage due to improper use of cables!

If you insert a network cable that is connected to a subwoofer or an NRC 1, either directly or via an SEA 1, into a network socket, the network device and the subwoofer can be damaged.

▶ Only connect the subwoofer(s) and the SEA 1 to Neumann remote controls or devices that deliver a RS-232 signal using a high-quality Neumann RC CAT5 cable (see below). Do not use a "crossover" type of CAT5 cable.
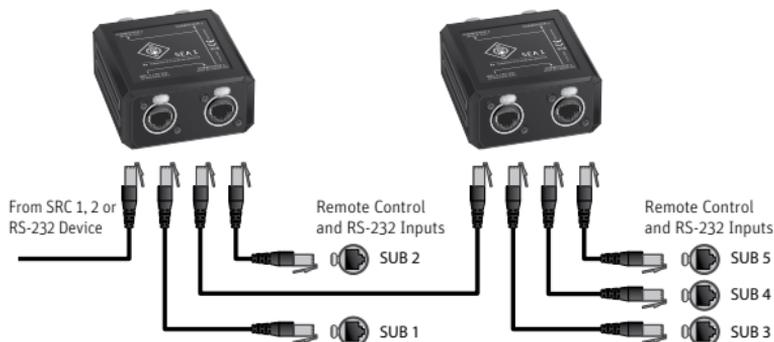
▶ Connect up to three subwoofers as shown:

From SRC 1, 2 or RS-232 Device

Remote Control and RS-232 Inputs

SUB 3

SUB 2

SUB 1

> ⓘ Since power for the device is supplied from the „SUB 1"
> socket, a subwoofer must always be connected to this
> socket.

▶ Connect more than three subwoofers as shown:

The following table shows the maximum number of subwoofers that can be controlled by several SEA 1:

Number of SEA 1 in a daisy chain	1	2	3	4
Max. number of connected subwoofers	3	5	7	9

> ⓘ It is possible to control more than 9 subwoofers using addi-
> tional SEA 1. However, the subwoofers connected to later
> SEA 1 in the chain may suffer from a noticeable latency in
> volume level changes. It is therefore not recommended to
> daisy chain more than 9 subwoofers.

Cleaning and maintaining the SEA 1

CAUTION
Damage to the product caused by liquids!

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

▶ Keep all liquids away from the product.

▶ Before cleaning, disconnect the SEA 1 from the subwoofer.

▶ Use a soft, dry, and lint-free cloth to clean the product.

Specifications

Electrical data	
Connections	4 x Neutrik EtherCon RJ45 socket
Supported volume controls	NRC 1, NRC 2, RS-232
Recommended max. number of connectable SEA 1	4 (supports up to 9 subwoofers)

Mechanical data	
Housing material	aluminum and ABS
Housing color	black
Dimensions	80 x 84 x 40 mm (H x W x D) 3 1/8" x 3 1/4" x 1 5/8"
Weight	175 g (0.4 lbs)

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Pin assignment of the socket for NRC 1/2 remote control or RS-232 source

Function	RJ-45 pins
Volume control	1
LOGO voltage	2
GND[*]	3
RS 232 TX[*]	4
RS 232 RX[*]	5
Supply voltage +3.3 V	6
Bypass bass management	7
+10 dB LFE gain	8

[*]   RS-232 data connections

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.

In compliance with the following requirements

- WEEE (2002/96/EC)
  Please dispose of the product at the end of its operational lifetime by taking it to your local collection point or recycling center for such equipment.

C€ Declaration of Conformity

- RoHS Directive (2011/65/EC)
- EMC Directive (2004/108/EC)

The declaration is available on the product page at www.neumann.com.

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