

Steinway & Sons Marine Speaker

INSTALLATION MANUAL

TABLE OF CONTENTS

TABLE OF CONTENTS	2
INTRODUCTION TO THE MARINE SPEAKER	3
UNPACKING THE MARINE SPEAKER	3
MOUNTING THE MARINE SPEAKER	4
CONNECTION OF EQUIPMENT	7
LOUDSPEAKER PLACEMENT IN THE LISTENING AREA.....	8
ROOMPERFECT™ CALIBRATION.....	10
PROTECTING THE SPEAKER	12
CLEANING THE SPEAKER	13
TECHNICAL SPECIFICATIONS	14
SERVICE INFORMATION	15

INTRODUCTION TO THE MARINE SPEAKER

Safety Warnings

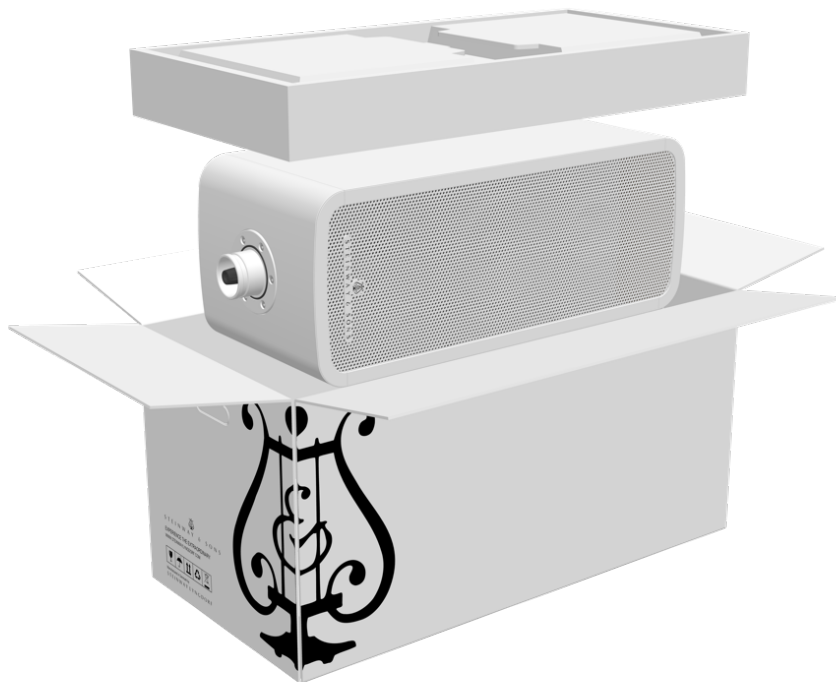


Physical Handling

The Marine Speaker is very large and heavy. It can be difficult to handle. Follow all instructions for unpacking and installation. Use ergonomically correct body positions. Be careful not to unbalance the speakers during handling. Steinway Lyngdorf cannot be held responsible for any physical damage which occurs during the installation process.

UNPACKING THE MARINE SPEAKER

1. Place the box near its final place in the room. Remove the top.



In each package you will find the following items:

- **Marine Speaker**
- **1 Neutrik speakON cable connector, inserted at the underside of the speaker**
- **1 Hex Allen Key, Size 6**
- **1 Protective Speaker Cover**

Note: Any mounting stand or accessory for mounting is optional and packed separately.

MOUNTING THE MARINE SPEAKER

Option 1: Mounting the Marine Speaker floor-standing with the optional stand

A dedicated, optional stand allows to mount the Marine Speaker to the floor on listening height.

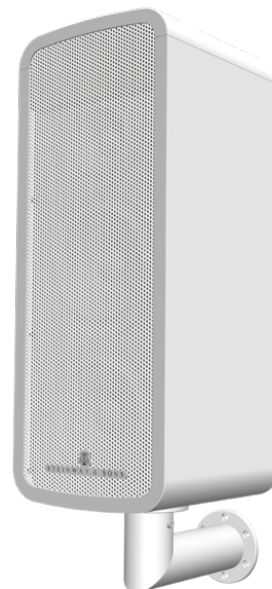
1. Mount the tubular stand tightly to the floor, with the speaker wire running through it. Use appropriate mounting screws, considering the floor construction and material as well as the loudspeaker's weight.
2. Place the Marine Speaker on its side, protecting floor and speaker with a soft, non-slippery mat.
3. Take out the Neutrik speakON connector from the underside. Attach the speaker wires to the Neutrik speakON connector according to the provided Wiring Diagram and reconnect it to the speaker terminal of the Marine Speaker.
4. Carefully place the Marine Speaker with the mounting ring inside the tubular stand and turn the speaker towards the listening position. Tighten the two side screws to fix the tube.



Option 2: Mounting the Marine Speaker on a custom-made stand

Alternative to the optional stand, the Marine Speaker can be mounted with its mounting ring to custom-made plinths, podiums, stands, or other mounting assemblies.

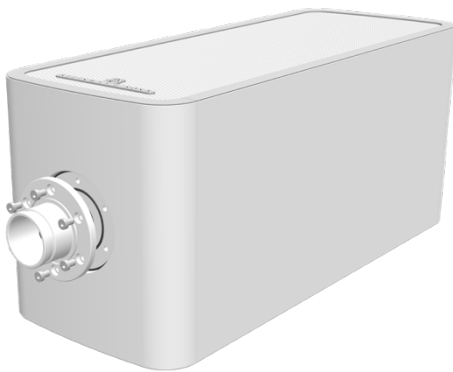
1. Mount the custom-made stand, with the speaker wire running through it. Use appropriate mounting screws, considering the wall or floor construction as well as the loudspeaker's weight.
2. Place the Marine Speaker on its side, protecting floor and speaker with a soft, non-slippery mat.
3. Take out the Neutrik speakON connector from the underside. Attach the speaker wires to the Neutrik speakON connector according to the provided Wiring Diagram and reconnect it to the speaker terminal of the Marine Speaker.
4. Carefully place the Marine Speaker with the mounting ring inside the tubular stand and turn the speaker towards the listening position. Tighten the two side screws to fix the tube.



Option 3: Mounting the Marine Speaker hanging

Alternative to floor standing, the Marine Speaker provides a second mounting ring and speaker cable connector on the upper side. Use custom-made mounting assemblies to use the speaker hanging.

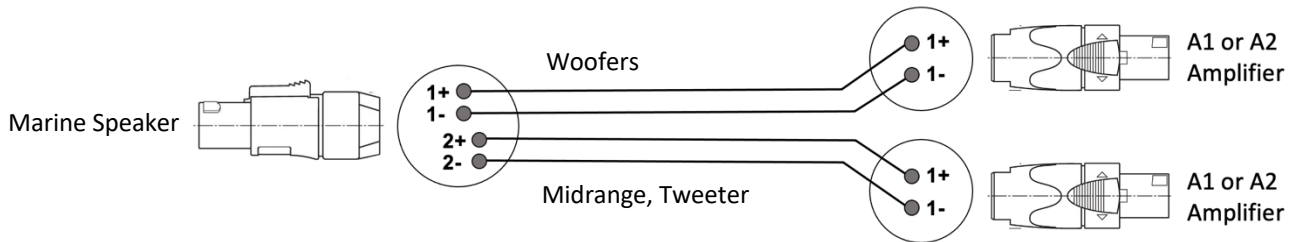
1. Place the Marine Speaker on its side, protecting floor and speaker with a soft, non-slippery mat.
2. Remove the Marine Speaker's flat mounting cover on the underside, and take out the Neutrik speakON connector.
3. Remove the Marine Speaker's flat mounting cover on the top, and mount it to the underside to close the speaker.
4. Run the speaker wire through the mounting tube or custom mounting assembly, attach the speaker wires to the Neutrik speakON connector according to the provided Wiring Diagram, and connect it to the speaker terminal on top of the Marine Speaker.
5. Carefully mount the Marine Speaker to the custom mounting assembly. Use appropriate mounting screws, considering the ceiling or wall construction and material as well as the loudspeaker's weight. Tighten all mounting screws.



CONNECTION OF EQUIPMENT

Speaker Cable Wiring

The Marine Speaker must be connected to the Steinway & Sons A1 or A2 amplifiers through speaker wires fitted with Neutrik speakON connectors. On the speaker side, one Neutrik speakON connector is provided with the Marine Speaker. Refer to the Wiring Diagram file provided with the Steinway & Sons Processor.



Warning: Only use either the Neutrik speakON connection on the top of the speaker, or the Neutrik speakON connection on the underside. Connecting the speaker from both sides will damage the amplifier.

Amplifier DIP Switchboard Addressing

The speaker will be connected to the A1 or A2 amplifiers, depending on the individual system setup.

The red DIP switchboard on the back of each A1 or A2 amplifier must be set for correct identification of the speaker connected to it.

You will find the actual Unit ID switch setting in the Wiring Diagram file provided with the Processor.



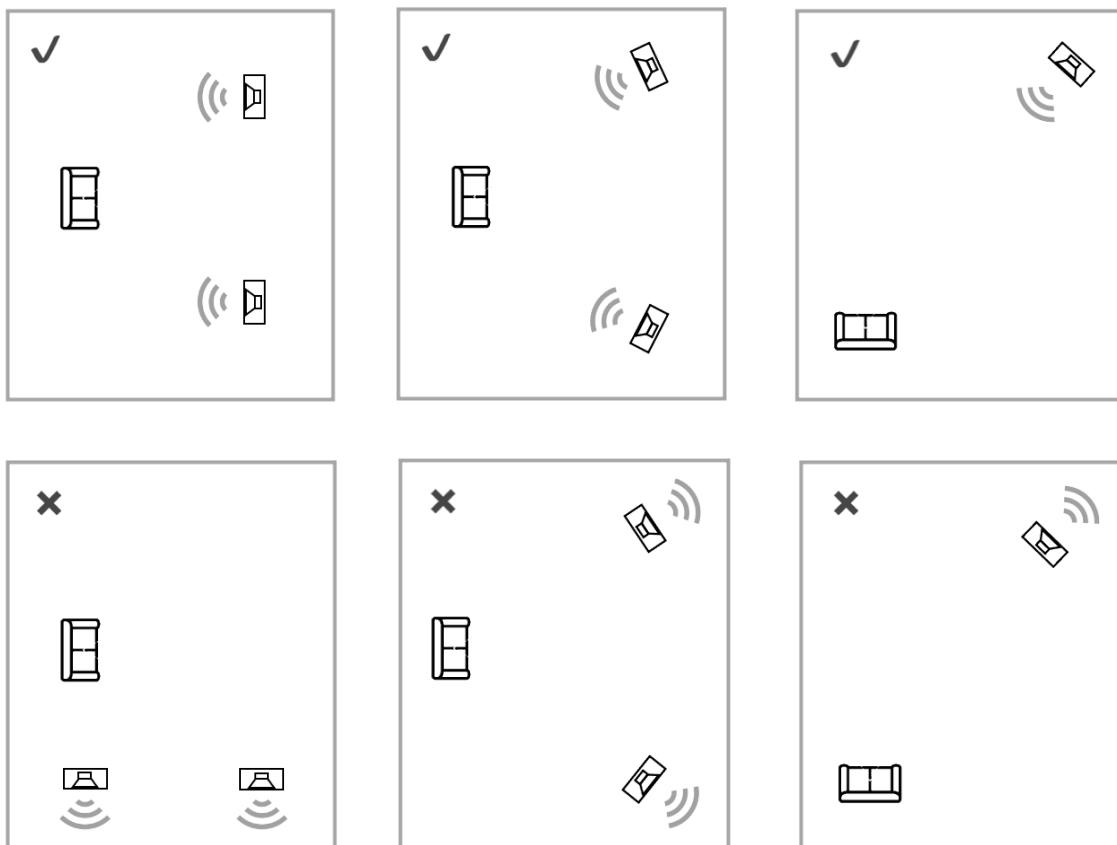
LOUDSPEAKER PLACEMENT IN THE LISTENING AREA

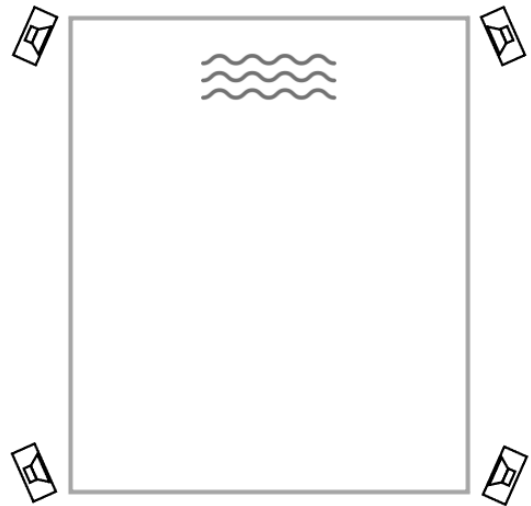
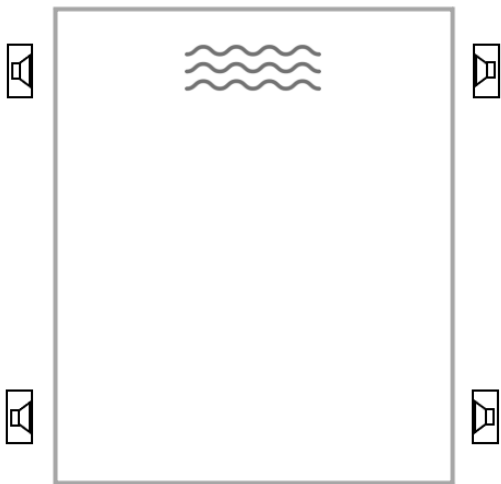
Guidelines for the best sound experience

The Steinway Lyngdorf RoomPerfect™ calibration will always ensure best possible sound performance from any given placement and given listening area. The following advice will provide the best starting point for the calibration.

- The Marine Speaker has been designed to be free-standing. Closer placement to the wall is still possible with RoomPerfect™ calibration.
- For the best sound experience with two speakers, the setup should follow the basic stereo triangle (60x60x60 degrees) with the main listening area placed in the middle between two speakers.
- For the best sound experience in a larger area, an even number of speakers (four, six, eight, or more) can be set up, with the main listening area placed in the middle of all speakers and the speakers facing the listening area.
- The Marine Speaker has one tweeter, one midrange driver and two woofers placed on the front side. On the back side, two passive radiators reproduce the bass additionally. Therefore, every Marine Speaker should be directed with its front side towards the main listening area, either straight or slightly toed-in.
- For the best sound experience, all speakers should be mounted on ear level.

After all speaker placements and listening positions have been chosen, type-in the measured speaker distances in your Steinway Lyngdorf Processor and run the RoomPerfect™ calibration.





ROOMPERFECT™ CALIBRATION

Why do you need room correction? The characteristics of your room affect the sound that reaches your ears. In any system, more than 50% of the sound you hear comes from the contribution of the room, echoes, reflections, absorption, and the like.

Follow the instructions of the Installation Manual of the Processor, but note that during measurements, you can work, talk and move around in the room. But the measurements will last longer depending on the level of background noise.

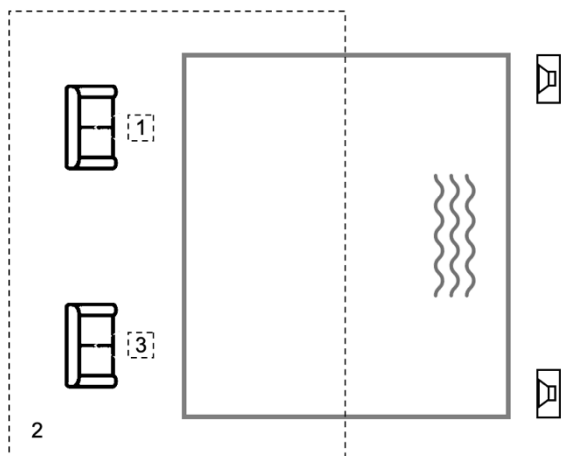
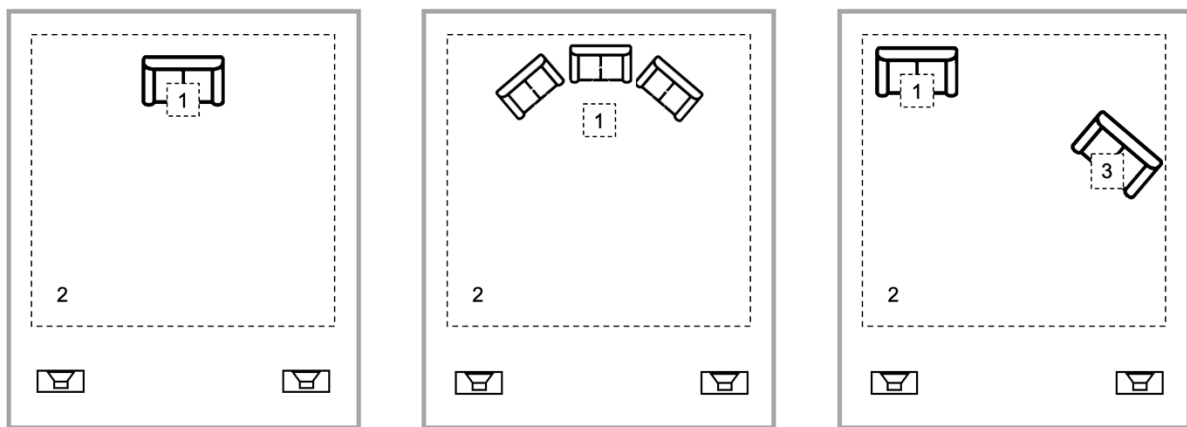
Guidelines for a correct calibration

In closed rooms, RoomPerfect™ will address room acoustical issues such as typical room modes and boundary reflections, and improve the sound performance in the listening area.

In open spaces, RoomPerfect™ won't be required to take care of the typical room modes and boundary reflections known from closed rooms. RoomPerfect™ will still audibly improve the stereo or surround imaging in the main listening area by levelling and aligning all speakers correctly, and lead to an overall better sound performance compared to speaker systems without any calibration.

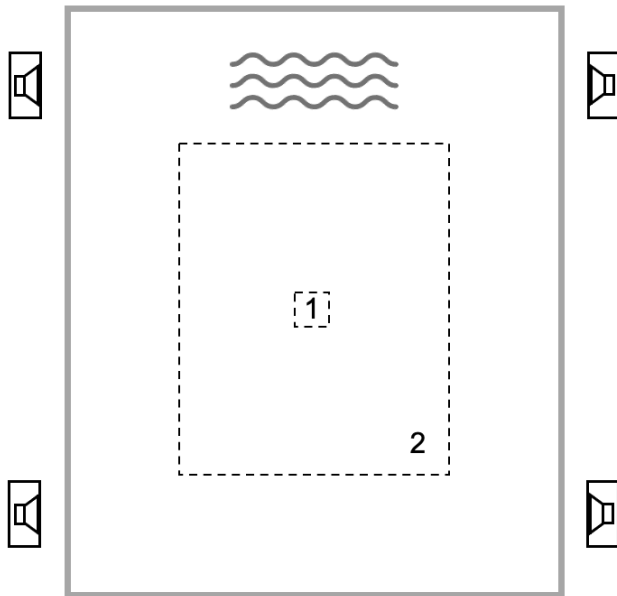
RoomPerfect™ will measure in two parts. A preferred listening seat or main listening area (1) has to be defined and measured as the Focus position, followed by several random measurements across the room (2).

If there is more than one preferred listening seat or main listening areas, additional Focus positions can be defined after the room measurements (2) in a following measurement (3).

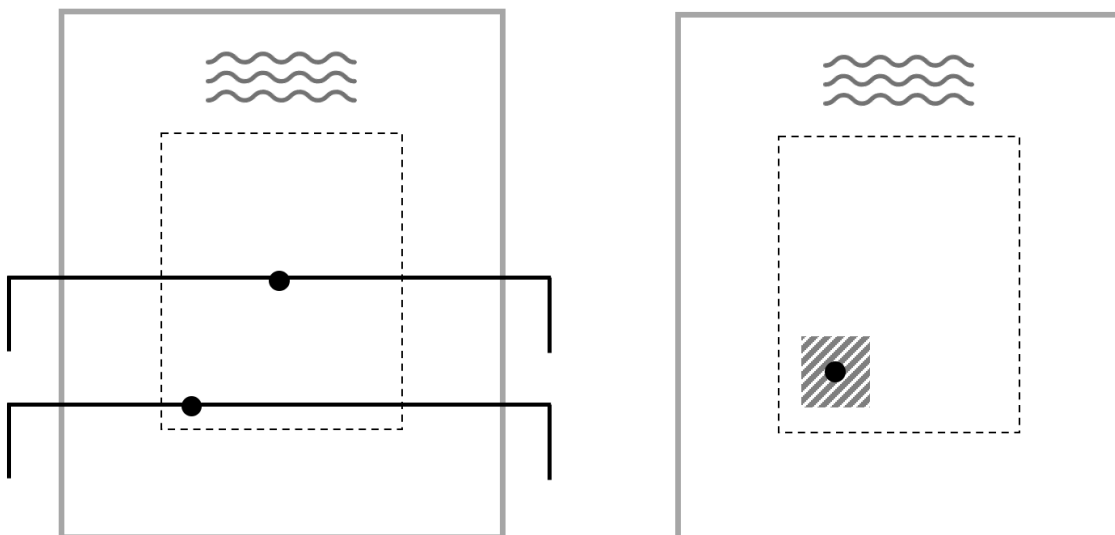


Outdoor and pool measurements

When a swimming pool is the main listening area, the first RoomPerfect™ Focus measurement should be taken at the center of the listening area (1) followed by room measurements around the center (2).



Two tripods with a cross beam or a stable raft can be used to place the microphone stand in the recommended positions.



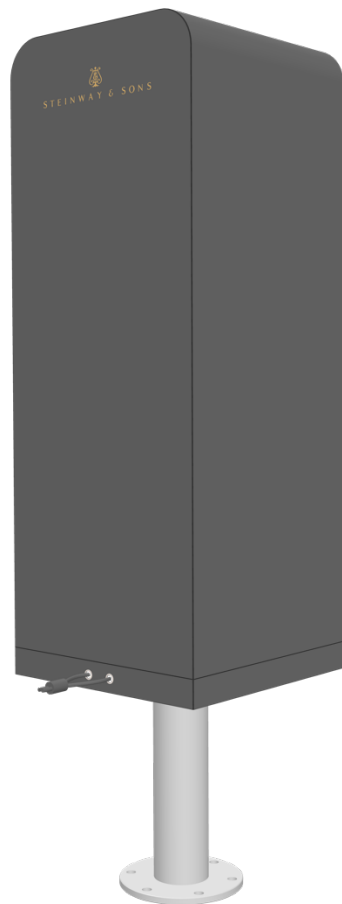
PROTECTING THE SPEAKER

Protective Speaker Cover

The Marine Speaker comes with a matching protective speaker cover. Please cover the speaker for:

- Protection against bad weather conditions (rain, snow, splash water, strong wind, sandstorm, flying parts)
- Protection against water cleaners (high-pressure cleaners, washer guns, washing liquids)
- Protection against mechanical damage and scratches (cleaning vehicles, garden vehicles, pets, wildlife)

Slide the cover over the speaker and pull the cord zipper.



CLEANING THE SPEAKER

Clean the speaker with a microfiber cloth. Do not use special polish or cleaning agents as these may cause damage to the surfaces.

The Marine Speaker is splash water proof, but cleaning with high-pressure water guns should be avoided as this may damage the loudspeakers behind the white mesh grille.

When not in use, always protect the Marine Speaker with the supplied speaker cover.

TECHNICAL SPECIFICATIONS

Description: Full-range outdoor loudspeaker

Tweeter: Air Motion Transformer

Midrange: 1 x 150 mm / 5"

Woofers: 2 x 230 mm / 8", 2 x 260 mm / 10" passive radiators

Enclosure: Powder coated aluminum, trim PVD coated stainless steel, IP65 rated

Frequency range: 43 – 20,000 Hz (-3 dB)

Amplification: 2 x 400 watt per loudspeaker

Amplification channels: 2

Max SPL@1m: 120 dB

Crossover: 500Hz, 2500Hz

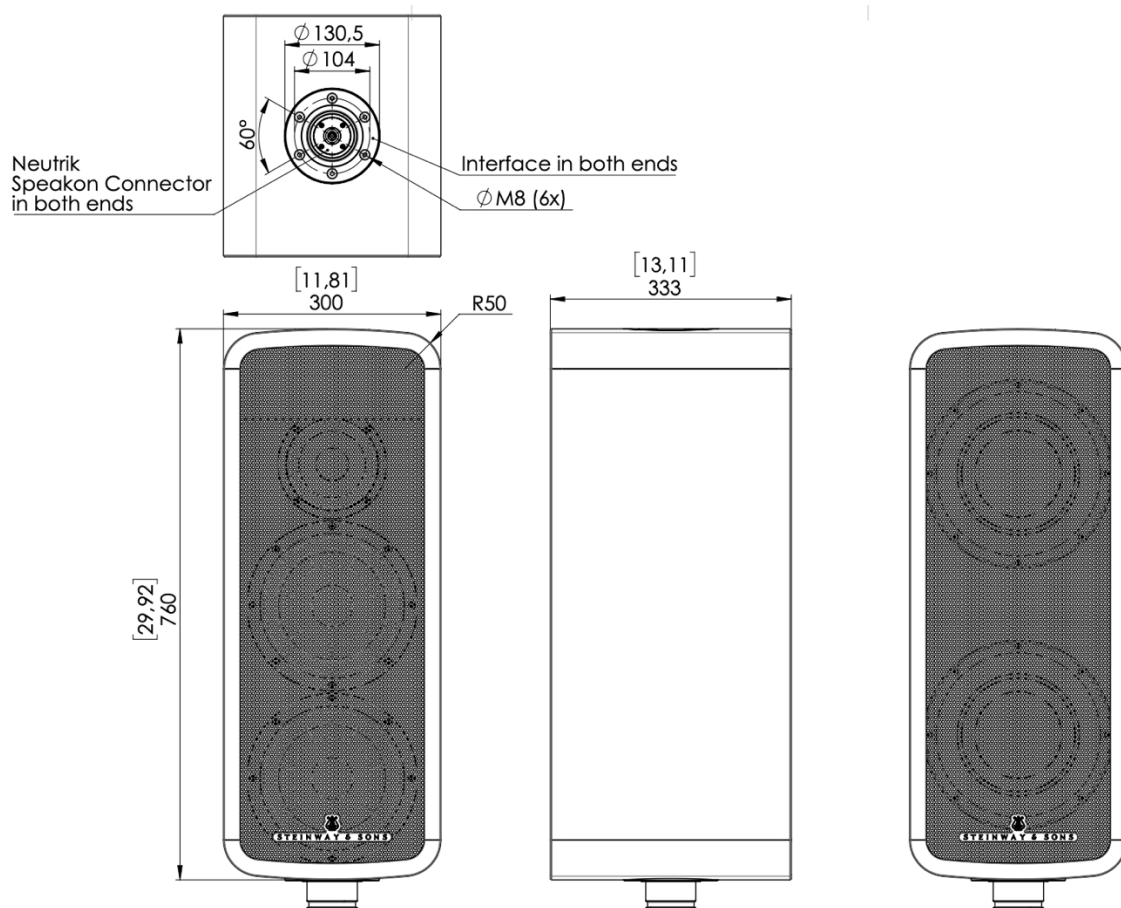
Connections: Neutrik speakON, 1x top, 1x underside. Note: Only 1 must be used.

Placement: Floor-standing or custom mounted, outdoor use

Dimensions (W x H x D): 300 x 760 x 333 mm / 11.8 x 29.9 x 13.1" (without mounting assembly),
300 x 1120 x 333 mm / 11.8 x 44.1 x 29.9" (with tubular mounting foot)

Weight: 39 kg / 85 lbs

Finish: High gloss white with high gloss gold trim, white aluminum mesh grille, custom finishes available



Note: Please find all technical drawings in PDF and DWG format on our website www.steinwaylyngdorf.com

SERVICE INFORMATION

To obtain warranty service, you must contact your local representative from Steinway Lyngdorf, or you may email contact@steinwaylyngdorf.com

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DK-7800 Skive
Denmark

In some cases, the Customer Service Department may solve a service problem without the need of repair or any other measures, thereby avoiding further inconvenience or delay. In some cases, it may be necessary to return the equipment to Steinway Lyngdorf or an authorized service provider for repair; therefore, it is recommended that you save your original packing materials. Steinway Lyngdorf will not be responsible for any damage due to unauthorized packing or shipment in non-original packing materials. If return is made in authorized packaging, risks are borne by Steinway Lyngdorf. Additional charges may occur if new packing materials are required for return shipment.

Please check the latest version and other languages of this printed manual on our website.

www.steinwaylyngdorf.com

