TH-100 BLACK-EN54

Horn speaker for Voice Alarm, 100W power, certified EN 54-24



Mechanical Data

Colour	RAL 9005
Dimensions	1252x832x412 mm
Weight (net)	16,0 kg
Power	100/50/25W
Connector	4-pin ceramic block
Terminal Diameter	3,2 mm
Maximum Cable Passage	8 mm²
Mounting	V5A mounting bracket

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TH-100 BLACK-EN54

Mounting Instruction

The TH-100-WH and TH-100-PH mounting brackets are not included in the standard delivery of the TH-100-EN54 product.

Mounting TH-100-WH

1. Attach two mounting brackets each (**WH** left and **WH** right) to the ceiling using suitable fixing material. For the correct position and drilling dimensions refer to drawing **TH-100-WH (1)**.
2. Hang the speaker loosely in the brackets with the 4 screws M8x20 and the washers M8. To do this, insert the screws into the housing up to half of the thread length. For the correct position refer to drawing **TH-100-WH (2)**.
3. Loosen the 8 screws M8x25 including the steel and rubber washers M8 of the rear cover and remove the cover.
4. Feed the speaker cable through the PG gland and connect the cable to the ceramic clamp, according to the required power (see imprint on the clamp).
5. Put the cover back on and fasten it with the 8 screws M8x25 and the steel and rubber washers M8.
6. Tighten the screws of the rear cover of the horn driver in 2 steps:
    1. Tighten all 8 screws with a torque of 2 Nm.
    2. Retighten the screws with 2 Nm.
7. Align the speaker upward in the bracket so that both, the front edge of the horn and the rear cover rest against the ceiling.
   Note: To ensure full acoustic performance, the speaker must be flush with the ceiling.
8. Once the speaker is aligned, tighten the 4 screws M8x20 with the washers M8. Please use a torque of 16 Nm for tightening the screws of the bracket.

CE 16

CE-Symbol according to 93/68EWG
Measurements according to DIN IEC 268-5
RoHS compliant (2011/65/EU)
CPR compliance according 305/2011/EU

Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings
ic audio GmbH, Boehringerstraße 14A
68307 Mannheim, Germany

EN54-24:2008
Ref. Nr.:01T-15
ID-Code:SAA-TH01
1438-CPR-1263

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TH-100 BLACK-EN54

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Mounting Instruction

Mounting TH-100-PH

1. Assemble the bracket using the 4 countersunk screws M6 including nuts M6. For the correct position refer to drawing **TH-100-PH (1)**.
2. Attach the bracket to the ceiling using suitable fixing material. For the drilling dimensions refer to drawing **TH-100-PH (2)**.
3. Hang the speaker loosely in the brackets with the 4 screws M8x20 and the washers M8. To do this, insert the screws into the housing up to half of the thread length. For the correct position refer to drawing **TH-100-PH (3)**.
4. Loosen the 8 screws M8x25 including the steel and rubber washers M8 of the rear cover and remove the cover.
5. Feed the speaker cable through the PG gland and connect the cable to the ceramic clamp, according to the required power (see imprint on the clamp).
6. Put the cover back on and fasten it with the 8 screws M8x25 and the steel and rubber washers M8.
7. Tighten the screws of the rear cover of the horn driver in 2 steps:
    1. Tighten all 8 screws with a torque of 2 Nm.
    2. Retighten the screws with 2 Nm.
8. Align the speaker upward in the bracket so that both, the front edge of the horn and the rear cover rest against the ceiling.
   Note: To ensure full acoustic performance, the speaker must be flush with the ceiling.
9. Once the speaker is aligned, tighten the 4 screws M8x20 with the washers M8. Please use a torque of 16 Nm for tightening the screws of the bracket.

Safety note: Due to the weight of the product, we recommend that the installation is carried out by 2 people.

CE
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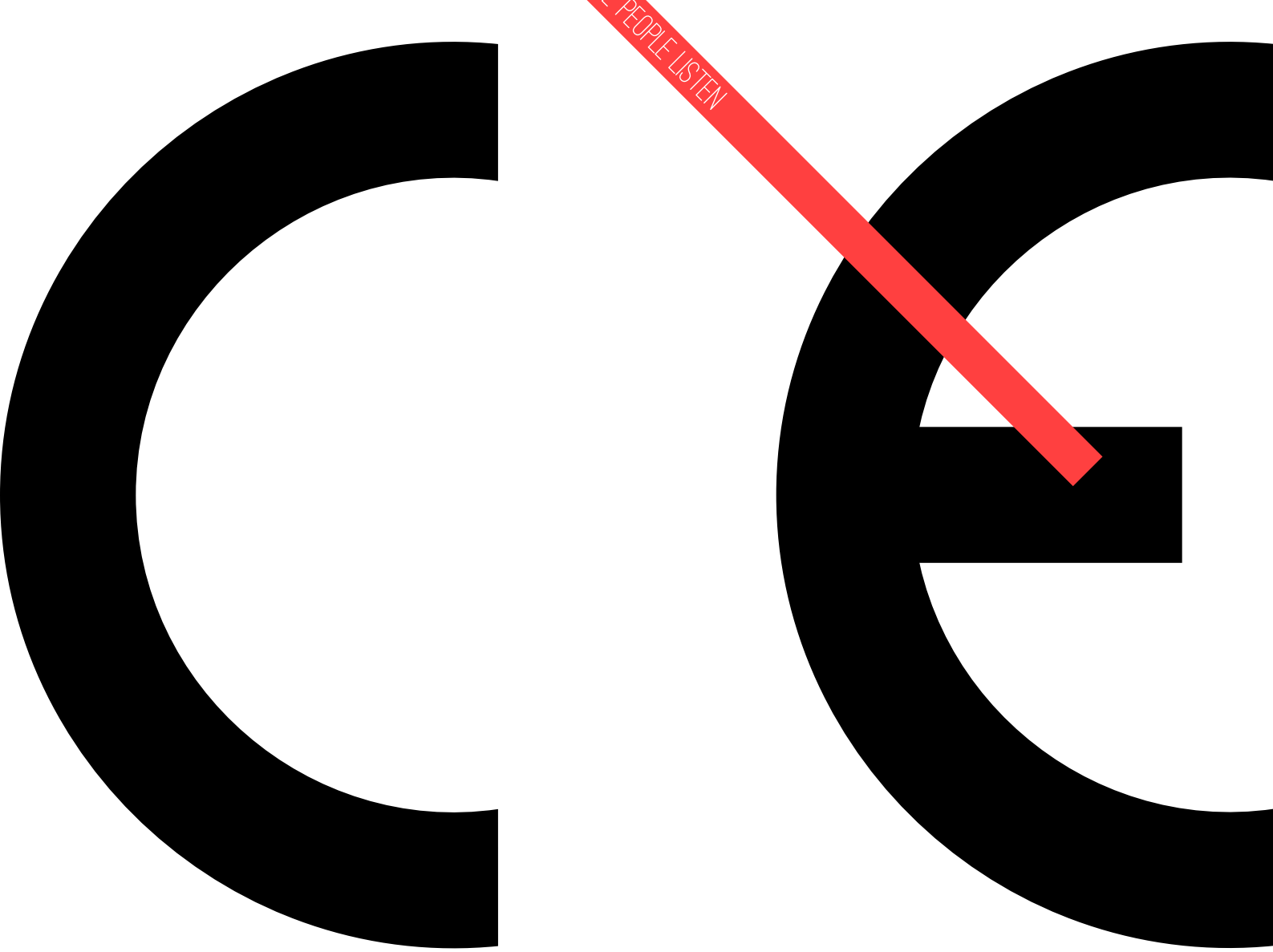
CE-Symbol accordi 3/68EWG
Measurements accordi DIN IEC 268-5
RoHS compliant (2011/65/
CPR compliance according 30 /EU

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STIPA male

Recommended EQ / DSP setting when using a STIPA test signal at maximum level: Apply a high-pass (HP) filter at 300 Hz–400 Hz with a 12 dB/octave Butterworth slope.

Note:

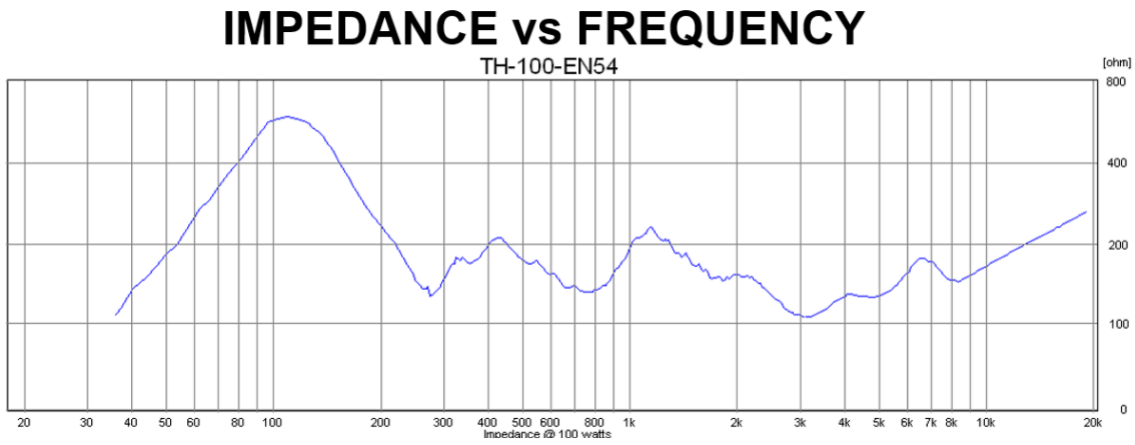
Why does the achievable sound pressure level improve when the signal is filtered?

Frequencies below 250 Hz are hardly transmitted by the tunnel horn, so the level in the 125 Hz band can be reduced. This frees up output voltage in the 100-volt amplifier for the remaining third-octave bands.

Impedance Measurement

Please ensure that the horn's sound-exit opening is not blocked during the measurement, for example, by resting the horn on the floor. Any obstruction will lead to inaccurate readings.

Some impedance meters take measurements at a fixed frequency - usually 1 kHz. Because resonances are present at that point, the meter can indicate an impedance that is too high and does not reflect the actual power consumption (see diagram)



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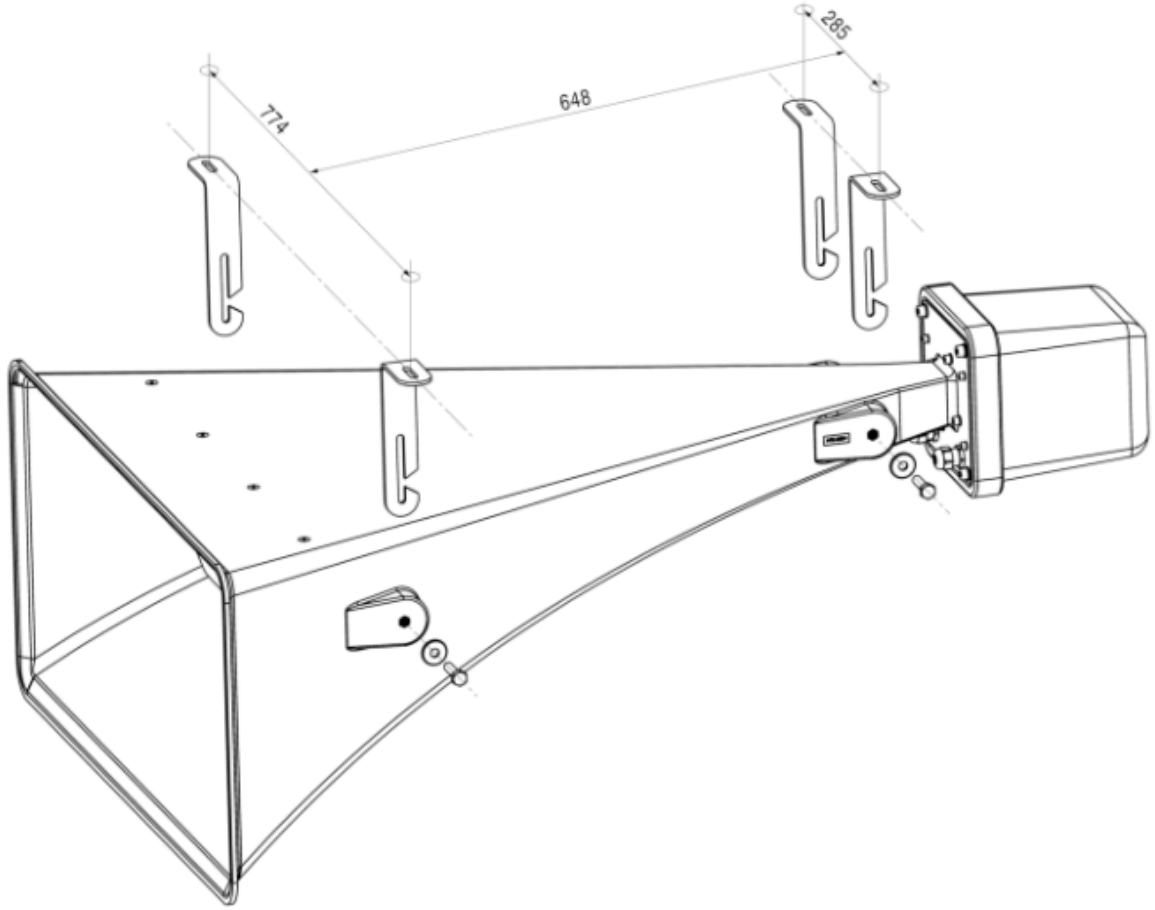
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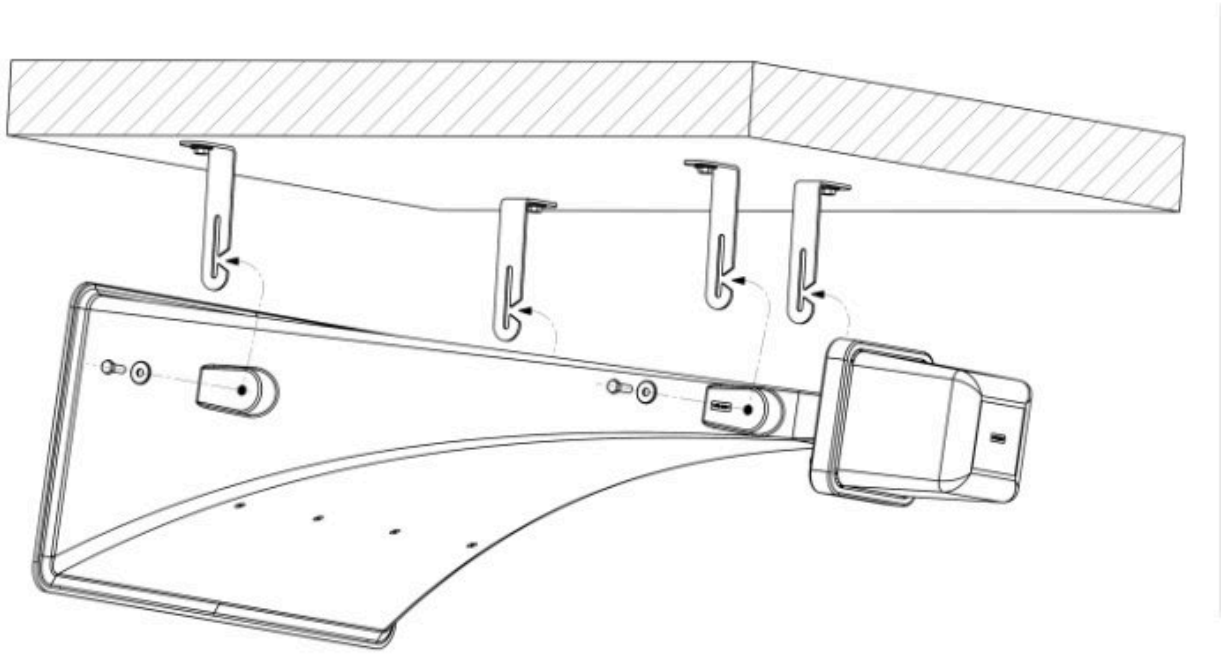
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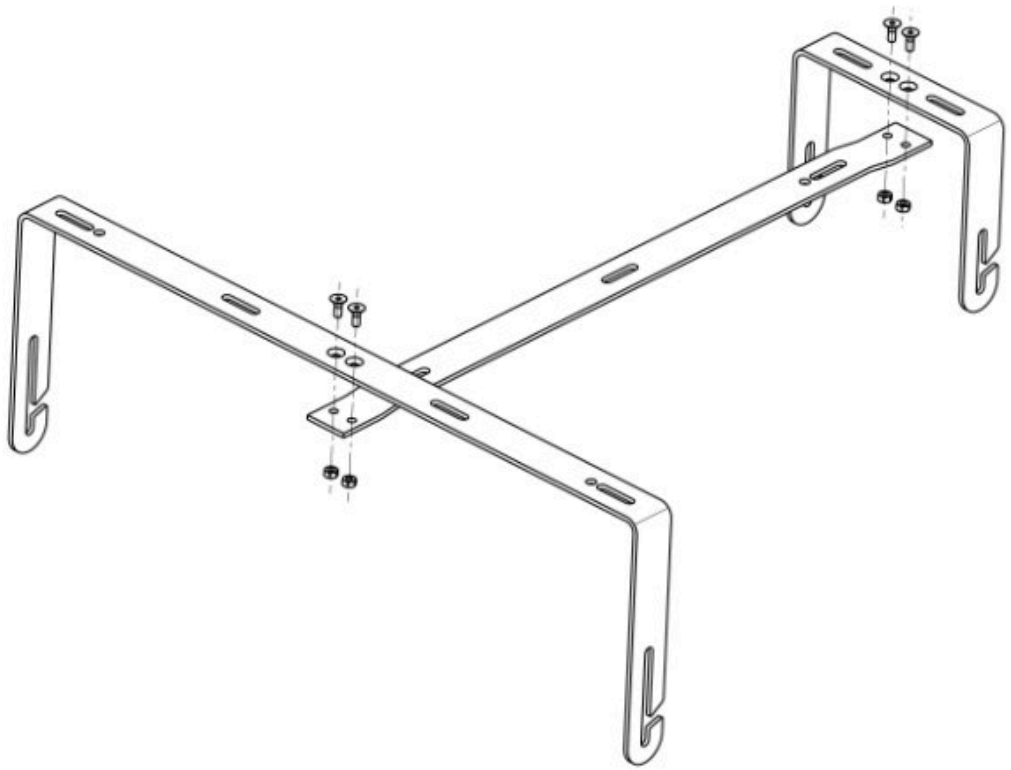
TH-100-WH (1)



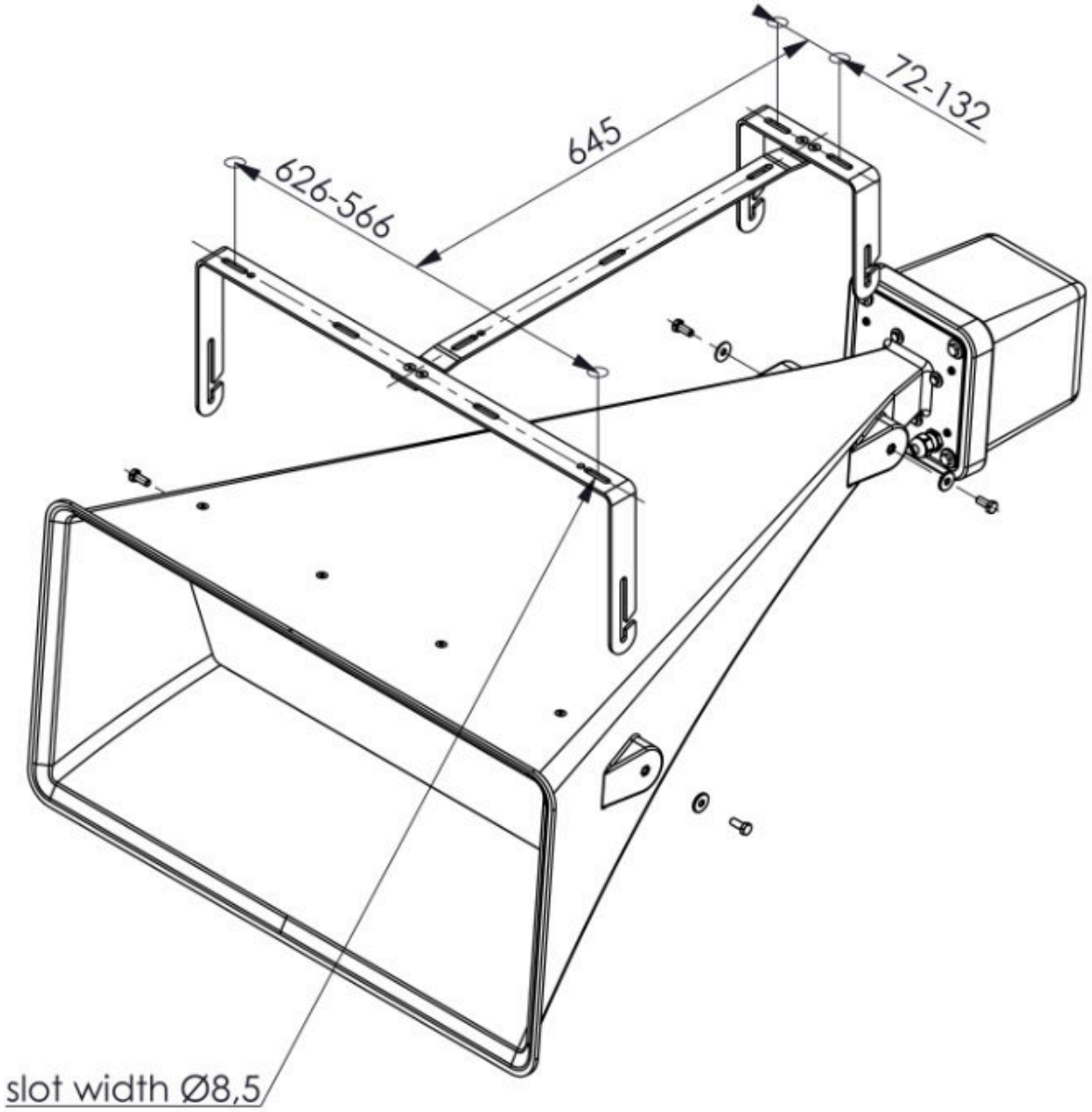
TH-100-WH (2)



TH-100-PH (1)



TH-100-PH (2)



TH-100-PH (3)

