A-225EN

ALTAVOZ DE TECHO
CEILING SPEAKER

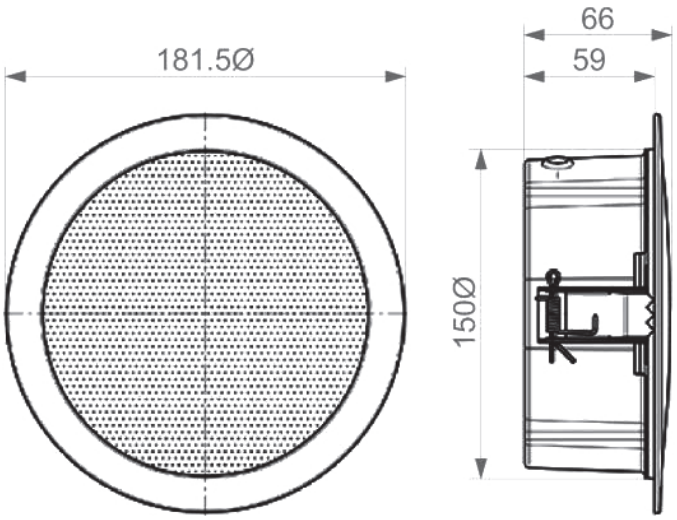
Manual de instalación y funcionamiento v1.4
Installation and operating instructions v1.4

OPTIMUS

1. DESCRIPTION

A 5" ceiling loudspeaker of 6 W, 100 V line. It can be installed in shallow suspended ceilings and has an antistatic PET plastic dome. EN 54-24 certified.

2. DIMENSIONS



3. WARNINGS

⚠ Installation should be done by qualified personnel.

⚠ Connect the speakers in parallel to the corresponding amplifier output terminals.

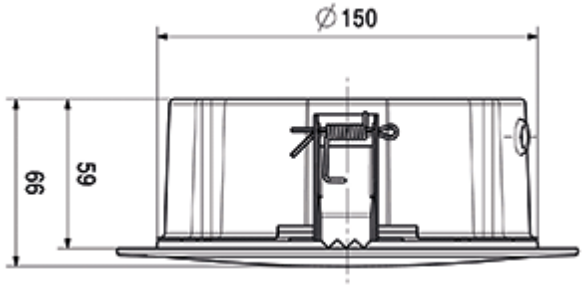
⚠ Make sure all speakers are connected with the same polarity.

⚠ Do not change the transformer tap while the speaker is in use.

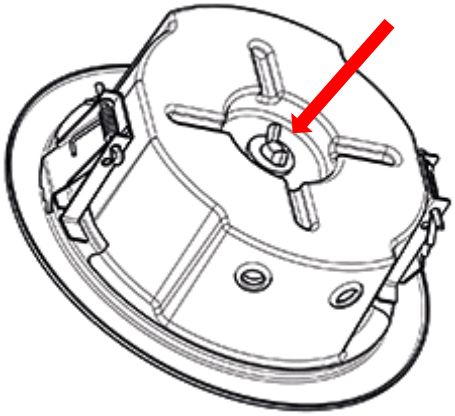
⚠ Do not expose the equipment to heat sources or open flames.

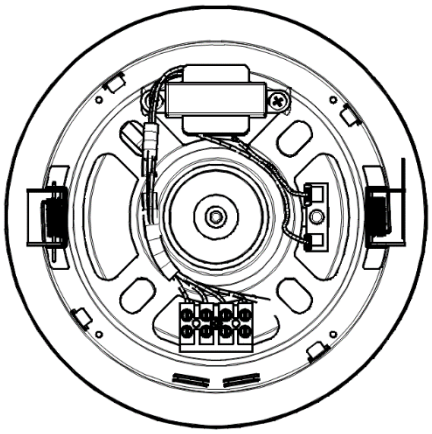
4. INSTALLATION

1. Mark the position of the speaker on the ceiling and cut the hole. If installing multiple speakers, consider creating a template to make the process faster.

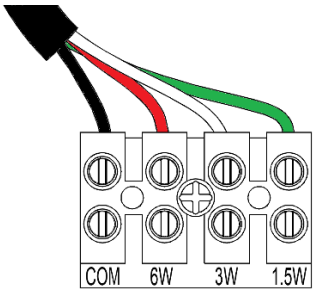


2. Loosen the dome screw and remove the dome.



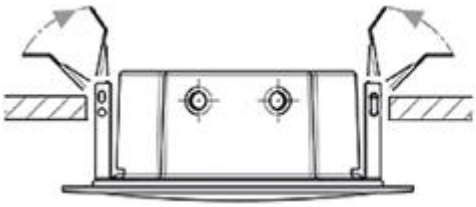


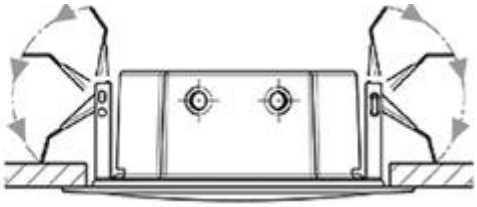
3. Drill the holes in the cable glands, pass the cable through, and connect it to the desired power terminal.



4. Reattach the dome and secure it with the retaining screw.

5. Unfold the mounting springs, place them into the hole and secure the speaker by pressing it upward.





5. SPECIFICATIONS

Model	A-225EN
Rated power (RMS)	6 W
Power Taps 100 V	6 W, 3 W and 1.5 W
Impedance	1k6 Ω, 3k3 Ω y 6k6 Ω
Sensitivity (SPL IEC268-5, 1 W / 1 m)	86 dB
Sound Pressure Level (SPL 6 W / 1 m)	93,8 dB
Sensitivity EN54 (SPL 1 W / 1 m)	86,8 dB
Frequency response	57 ~ 24.000 Hz
Operating temperature	-10 ºC ~ + 55 ºC
Dimensions (mm)	Ø 181.5 x 66 (depth)
Weight	0.6 kg
Finish	Metal. PET (polyethylene terephthalate) dome
Color	White RAL 9016
Mounting	Springs

GUARANTEE CERTIFICATE

1. GUARANTEE CERTIFICATE

1. OPTIMUS S.A. guarantees that its products are free from material and manufacturing defects when they are first delivered to the purchaser.

2. In accordance with the conditions outlined here, OPTIMUS S.A. guarantees its products for two (2) years from the date on which the purchaser acquires the product. If, within this guarantee period, defects appear which are not due to factors outlined in section 2, OPTIMUS S.A. shall replace or repair the unit using equivalent, new or reconstructed replacement parts, as it deems fit. If replacement parts are applied which improve the unit, OPTIMUS S.A. reserves the right to charge the client for the additional cost of these components.

3. No guarantee benefits shall be provided other than those cited here.

4. In order to claim the guarantee rights, it shall be an essential requirement to present the original purchase invoice or the guarantee certificate.

2. GUARANTEE PROVISIONS

1. In the event that the product had to be modified or adapted to comply with local requirements concerning technical specifications or safety, and if the country in question is not the country for which the product was originally designed and manufactured, defects are not considered to be material or manufacturing defects. Furthermore, the guarantee does not cover the execution of these modifications or adaptations, regardless of whether or not they have been carried out correctly.

Nor shall OPTIMUS S.A. be responsible for any costs under this guarantee for these types of modifications.

2. The guarantee shall not entitle the purchaser to inspection or free maintenance or repair of the unit, particularly if the defects are due to inappropriate use. Nor do the guarantee rights cover defects in wearing parts that become worn as a result of normal wear and tear. Wearing parts are, in particular, potentiometers, switches/keys, and similar parts.

3. The guarantee does not cover defects in the equipment unit caused by:
- Abuse or incorrect use of the unit for purposes other than those for which it is intended, in non-compliance with the service and maintenance instructions specified in the Manual and/or Technical Instructions for the unit.
- Connection or use of the product in a manner that does not correspond to the technical or safety requirements of the country in which the unit is used.
- Installation in conditions other than those indicated in the Manual and/or Technical Instructions.
- Deficiency or interruptions in the electricity supply or installation defects which imply use in abnormal conditions.
- Damage caused by other equipment units that are connected to the product.
- The use or installation of Software (programmes), interfaces, parts or supplies not provided and/or not authorised by OPTIMUS S.A.
- Failure to use the original packaging for transportation.
- Damage caused by force majeure or other causes not attributable to OPTIMUS S.A.

4. The following elements are not covered by this guarantee:
- All plastic surfaces and all parts exposed to outdoor conditions which have been scratched or damaged as a result of normal or abnormal use.
- Breakages, knocks, damage due to a fall or scratches caused by moving the unit in any way.
- Damage caused by tests, use, maintenance, installation or inappropriate adjustments, or as a result of any alteration or modification of any kind not carried out by a Service Authorised by OPTIMUS S.A. in compliance with this guarantee.
- Damage to persons or property that might be caused by the improper use of the equipment, including lack of maintenance.

5. The guarantee shall not be valid whenever the following is observed:
- Amendments or corrections made to the details of the guarantee certificate or purchase invoice.
- Failure to produce the original invoice or the absence of a date on this.
- Absence of the serial or batch number on the equipment.

6. The warranty does not cover travel for technical assistance except for those caused by incidents occurred during the first three months.

7. In the case of personal computers, the guarantee will not cover the elimination of computer viruses, the restoration of programmes damaged by these or the reinstallation of the disk following its deletion.

8. The rights of this guarantee are invalidated if the product has been repaired or opened by staff unauthorised by OPTIMUS S.A. or by the client himself.

9. If OPTIMUS S.A. were to establish before the purchaser that the damage affecting the unit does not entitle a claim to be made under the guarantee, the costs of checking the equipment incurred by OPTIMUS S.A. shall be borne by the client.

10. Products not covered by the guarantee shall only be repaired once payment has been affected by the client. In the event that the guarantee rights do not apply, OPTIMUS S.A. shall duly inform the client. If, within a period of 6 weeks from this communication, no written repair order is received from the client confirming acceptance of the costs, OPTIMUS S.A. shall return the unit in question to the client. In this case, the transport and packaging costs shall be invoiced separately and payment shall be made on delivery. In the event that a repair order is sent by the client, confirming that he assumes the costs of repair, the transport and packaging costs shall be invoiced additionally, and also separately.

11. If the equipment needs to be transferred to the Authorised Service Centre, transportation shall be affected by the responsible party according to the guarantee, who will also bear the freight and insurance costs.

12. In the event of a defect, OPTIMUS S.A. guarantees that the repair and/or replacement of parts so that the unit operates correctly will be made within a period of no more than 30 days. Nevertheless, OPTIMUS S.A. would like to clarify that the normal period does not exceed 30 days.

13. All parts or products replaced as part of the guarantee services shall become the property of OPTIMUS S.A.

3. TRANSFER OF GUARANTEE

The guarantee is solely awarded to the original purchaser (principal client) and is not transferable. With the exception of OPTIMUS S.A., no third party (dealers, etc.) is authorised to award additional guarantees on behalf of OPTIMUS S.A.

4. CLAIMS FOR DAMAGE

In the event that OPTIMUS S.A. cannot provide a suitable guarantee service, the purchaser shall not be entitled to claim any indemnity for damages arising. The responsibility held by OPTIMUS S.A. is limited in all cases to the invoicing price of the product.

5. RELATION WITH OTHER GUARANTEE RIGHTS AND NATIONAL LAW

1. This guarantee does not affect the rights of the purchaser with respect to the vendor arising from the contract of sale accomplished.

2. These conditions of the guarantee provided by OPTIMUS S.A. are valid as long as they do not contradict the corresponding national law on guarantee provisions.

3. OPTIMUS S.A. guarantees that this product complies with the safety regulations in force in the country.

THIS LIMITED GUARANTEE DECLARATION IS THE EXCLUSIVE GUARANTEE OFFERED BY OPTIMUS S.A. ALL OTHER EXPLICIT OR IMPLICIT GUARANTEES ARE EXCLUDED, AND THIS ALSO APPLIES TO GUARANTEES OF MARKETABILITY AND SUITABILITY FOR A PARTICULAR PURPOSE. (EXCEPT WHEN THESE GUARANTEES ARE REQUIRED BY AN APPLICABLE LAW). NO GUARANTEE, EITHER EXPLICIT OR IMPLICIT, SHALL BE APPLIED ONCE THE GUARANTEE PERIOD HAS EXPIRED.

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Declaracion UE de conformidad

UE Declaration of conformity

La declaracion UE de conformidad puede descargarse del siguiente enlace :
UE declaration *of conformity can be downloaded from the following link :*

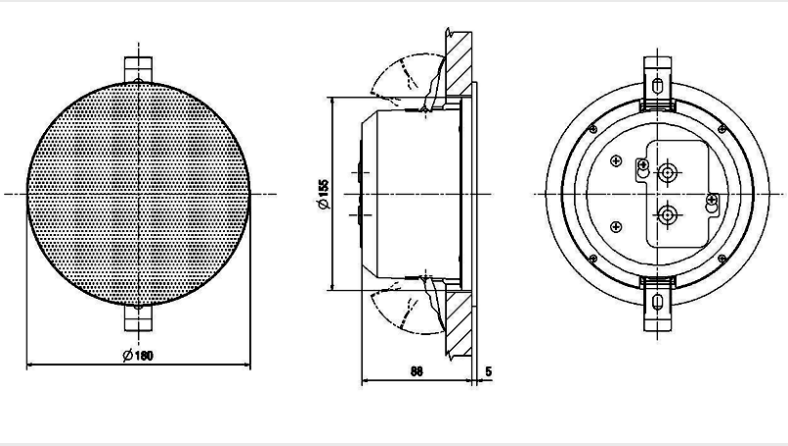
A-225EN

A225EN

Codigo *Code*	Modelo *Model*	Enlace *Link*
A225EN	A-225EN	https://www.optimusaudio.com/arxius/certificados/9DA225ENCE.pdf

INSTRUCTION MANUAL

CEILING SPEAKER



A-225DEN

WARNING:

- Installation by qualified personnel only.
- Speakers must be wired in parallel and connected to the correct line terminals of amplifier.
- Ensure that all speakers have the same polarity with respect to each other.
- Do not select another taping if the speaker is in use.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.

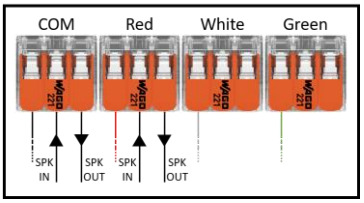
SPECIFICATIONS

Model	A-225DEN
Loudspeaker	5”
Rated Power (RMS)	6 W
Power Taps 100 V	6 W, 3 W & 1.5 W
Impedance	1667 Ω, 3333 Ω & 6667 Ω
Sensitivity SPL (1 W / 1 m)	90 dB
Sound Pressure SPL (6 W / 1 m)	98 dB
Freq. Range	80 ~ 20,000 Hz
Cutout Size	Ø 161 - 167 mm (ceiling strength: 1 ~ 45 mm)
Dispersion 1 kHz / 4 kHz	180º / 75º
Operating temperature	-10ºC ~ +55ºC
Protection range	IP-21C
Dimension (mm)	Ø 180 x 93 (depth)
Weight	0.78 kg
Finish	Metal housing / RAL9016 colour
Grille	Metallic
Mounting	Quick fit mounting
Connector	WAGO 221 connector (Screwdriverless Installation)
EN54 Standard	CE EN 54-24:2008 Ref. No.: DOP_A225DEN ID-Code: A225DEN 1438/CPR/0981 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Ceiling Loudspeaker, 6W, Type A CE-Symbol according 93/68EWG

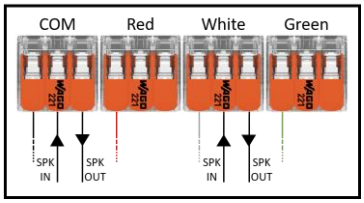
POWER SELECTION

Impedance	100 V	Color
-	COM	Black
1667 Ω	6 W	Red
3333 Ω	3 W	White
6667 Ω	1.5 W	Green

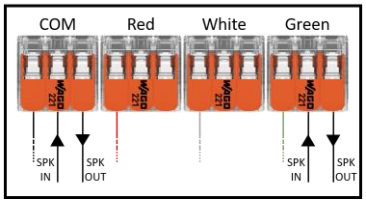
6W 100V



3W 100V



1.5W 100V



OPTIMUS SOUND INNOVATION

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Declaracion UE de conformidad

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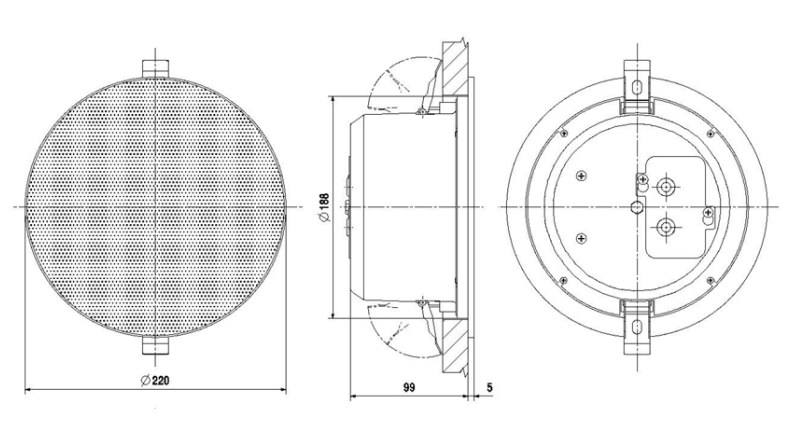
INSTRUCTION MANUAL

CEILING SPEAKER



A-226DEN

WARNING:

- Installation by qualified personnel only.
- Speakers must be wired in parallel and connected to the correct line terminals of amplifier.
- Ensure that all speakers have the same polarity with respect to each other.
- Do not select another taping if the speaker is in use.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.

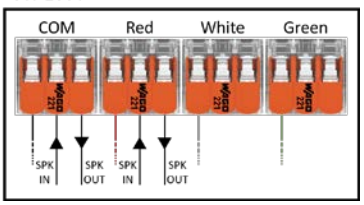
SPECIFICATIONS

Model	A-226DEN
Loudspeaker	6”
Rated Power (RMS)	6 W
Power Taps 100 V	6 W, 3 W & 1.5 W
Impedance	1667 Ω, 3333 Ω & 6667 Ω
Sensitivity SPL (1 W / 1 m)	92 dB
Sound Pressure SPL (6 W / 1 m)	100 dB
Freq. Range	56 ~ 18000 Hz
Cutout Size	Ø 194 - 202 mm
Dispersion 1 kHz / 4 kHz	180º / 90º (-6 dB)
Operating temperature	-10ºC ~ +55ºC
Protection range	IP-21
Dimension (mm)	Ø 220 x 107 (depth)
Weight	1.4 kg
Finish	Metal housing / RAL9016 colour
Grille	Metallic
Mounting	Quick fit mounting
EN54 Standard	CE EN 54-24:2008 Ref. No.: DOP_A226DEN ID-Code: A226DEN 1438/CPR/1051 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Ceiling Loudspeaker, 6W, Type A CE-Symbol according 93/68EWG

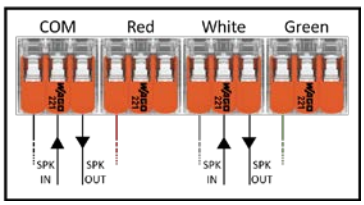
POWER SELECTION

Impedance	100 V	Color
-	COM	Black
1667 Ω	6 W	Red
3333 Ω	3 W	White
6667 Ω	1.5 W	Green

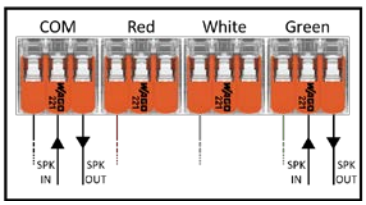
6W 100V



3W 100V



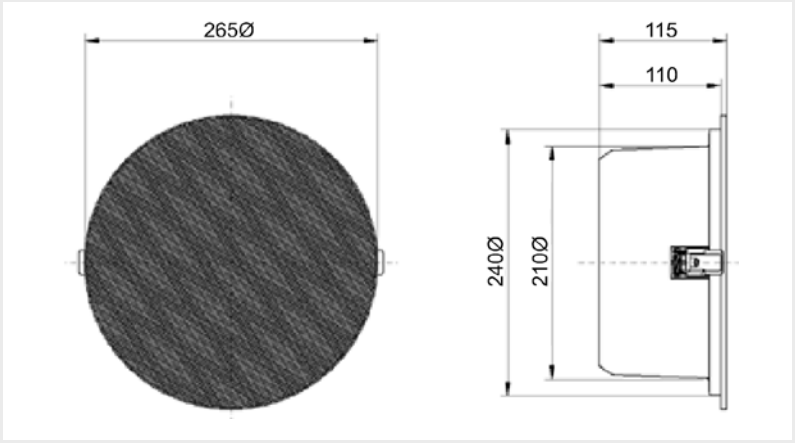
1.5W 100V



OPTIMUS SOUND INNOVATION

INSTRUCTION MANUAL

CEILING SPEAKER



A-228EN

WARNING:

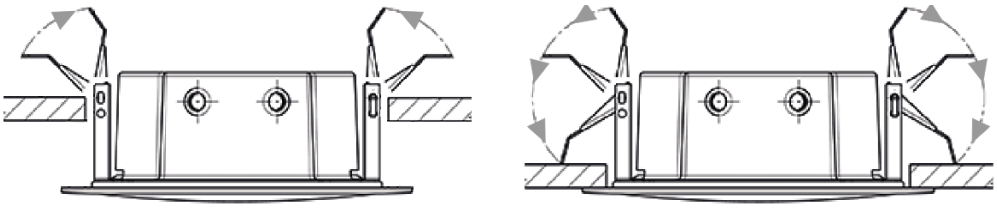
- Installation by qualified personnel only.
- Speakers must be wired in parallel and connected to the correct line terminals of amplifier.
- Ensure that all speakers have the same polarity with respect to each other.
- Do not select another tapings if the speaker is in use.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.

SPECIFICATIONS

Model	A-228EN
Loudspeaker	8”
Rated Power (RMS)	20 W
Power Taps 100V	20, 10 & 5 W
Impedance	500 Ω, 1k Ω & 2k Ω
Sensitivity	103 dB SPL at 1 W, 1 m IEC268-5
Sound Pressure	116 dB at 20 W, 1 m IEC268-5
Sensitivity EN54-24	78 dB SPL at 1 W, 4 m
Frequency Response	103 ~ 24000 Hz
Cutout Size	Ø 240 mm
Dimension (mm)	Ø 265 x 115 (depth)
Weight	3.4 kg
Finish	ABS, metal grille and fire dome
Colour	White RAL 9016
Mounting	Springs
Power selection	Terminals
Operation temperature	-10 / +55 Cº
Protection range	IP21
EN54 standard	CE EN 54-24:2008 Ref. No.: DOP_A228EN ID-Code: A228EN 1438/CPR/ 0736 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Ceiling Loudspeaker, 20W, Type A CE-Symbol according 93/68EWG

INSTALLATION GUIDE

1. Cutout a Ø 240 mm circle on the ceiling. Use a cardboard cutout template or a circular cutter set to the required cutout size.
2. Place the springs on two sides of speaker into the hole and release them to fix the speaker.



OPTIMUS SOUND INNOVATION