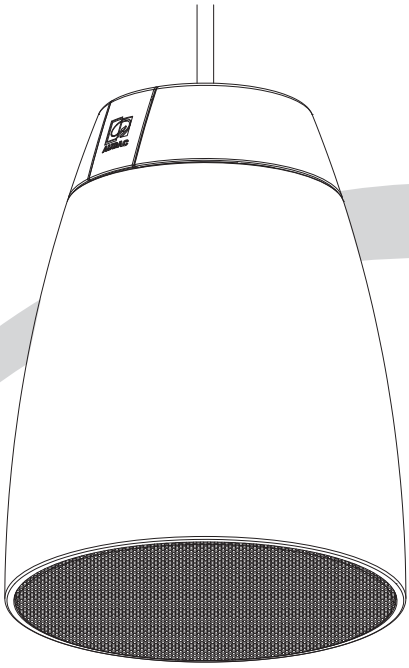
ALTI Series

User & Installation Manual



AUDAC

www.audac.eu

Introduction
2–Way pendant speakers

The ALTI series are two–way pendant loudspeakers, designed for background and foreground music applications with open architectures and high ceilings. Typical applications are big scale retail environments, warehouses and other large open spaces

The elegant construction is finished using high grade materials and fitted with premium acoustic components. This guarantees clear speech intelligence and a warm and detailed sound reproduction.

Mounting the speaker is done through a connection cable with two integrated steel cores for suspending with an additional drop safety. Fixation is made through two snap–hooks on one end and a dual Gripple® fixation on the other end. The included cable length of 3.5 meters offers possibilities for a wide variety of ceiling heights. An innovatively designed rear cover of the speaker can be placed after installation and hides the connection and suspension on the speaker end. The ceiling end connections are covered through a cable cover.

The 2–way combination with an coaxially mounted 1" soft dome tweeter and is fitted with a phase plug for excellent off axis performance. The high quality polypropylene enclosure and acoustic engineering craftmanship guarantees premium performance for demanding applications.

They come in two different models (ALTI4 and ALTI6) in terms of size and power handling. A multi–tapping line transformer allows them to be connected to 70V/100V public address systems with various power settings, while connections in low impedance (16Ω) systems are also possible.

Precautions

READ FOLLOWING INSTRUCTIONS FOR YOUR OWN SAFETY

- ALWAYS KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE. NEVER THROW THEM AWAY
- ALWAYS HANDLE THIS UNIT WITH CARE
- CLEAN ONLY WITH DRY CLOTH
- HEED ALL WARNINGS AND FOLLOW ALL INSTRUCTIONS
- NEVER EXPOSE THIS EQUIPMENT TO RAIN, MOISTURE, ANY DRIPPING OR SPLASHING LIQUID. AND NEVER PLACE AN OBJECT FILLED WITH LIQUID ON TOP OF THIS DEVICE
- DO NOT INSTALL THIS UNIT NEAR ANY HEAT SOURCES SUCH AS RADIATORS OR OTHER APPARATUS THAT PRODUCE HEAT
- DO NOT PLACE THIS UNIT IN ENVIRONMENTS WITH A HIGH LEVEL OF DUST, HEAT, MOISTURE OR VIBRATION
- THIS UNIT IS DEVELOPED FOR INDOOR USE ONLY. DO NOT USE IT OUTDOORS
- ONLY USE ATTACHMENTS & ACCESSORIES SPECIFIED BY THE MANUFACTURER.
- ONLY INSTALL THE SPEAKER IN LOCATIONS THAT CAN STRUCTURALLY SUPPORT THE WEIGHT OF THE SPEAKER. IGNORING THIS CAN BRING THE SPEAKER DOWN.
- DO NOT USE ANY OTHER METHOD THAN SPECIFIED TO MOUNT THE SPEAKER. IF EXTREME FORCE IS APPLIED TO THE SPEAKER, IT COULD FALL DOWN
- ATTACH A SAFETY WIRE TO THE SPEAKER WHEN IT IS MOUNTED HIGH UP. ONLY USE INDUSTRY–ACCEPTED RIGGING TOOLS AND METHODS
- CAREFULLY CHECK THE UNIT'S CONDITION AFTER UNPACKING. IF THERE IS ANY DAMAGE TO THE CARTON BOX OR THE UNIT ITSELF, INFORM YOUR VENDOR IMMEDIATELY.

CAUTION

- USE CABLES OF THE RIGHT GAUGE TO CONNECT THE LOUDSPEAKER
- USE CABLES WITH CLEAR COLOR CODING INDICATING THE POLARITY AND MAINTAIN THE SAME POLARITY THROUGHOUT THE WHOLE SYSTEM.
- ONLY USE THE CORRECT AMPLIFIER OUTPUT VOLTAGE AND IMPEDANCE. EXCEEDING THESE LIMITS COULD CAUSE FIRE OR OTHER FAILURES. **AVOID EXPLOSIONS:** DO NOT USE THE SPEAKER AROUND GASOLINE, THINNER OR OTHER COMBUSTIBLES
- AVOID ELECTRIC SHOCKS: SWITCH OFF THE AMPLIFIER WHEN CONNECTING THE LOUDSPEAKER
- DO NOT USE THE LOUDSPEAKER FOR AN EXTENDED PERIOD OF TIME AT DISTORTED SOUND. THIS COULD CAUSE PERMANENT DAMAGE.

CAUTION – SERVICING

This product contains no user serviceable parts. Refer all servicing to qualified service personnel. Do not perform any servicing (unless you are qualified to do so.)

EC DECLARATION OF CONFORMITY

This product conforms to all the essential requirements and further relevant specifications described in following directives: 2014/30/EU (EMC) and 2014/35/EU (LVD)

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

The WEEE marking indicates that this product should not be disposed with regular houshold waste at the end of its product life. This regulation is created to protect both the environment and human health.

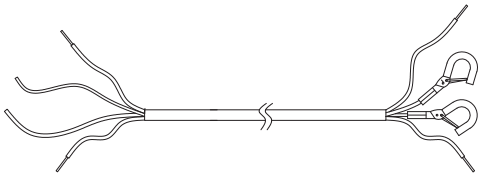
This product is developed and manufactured with high quality materials and components which can be recycled and/or reused. Please dispose this product to your local collection point or recycling centre for electrical and electronic waste. This will make to sure that it will be recycled on an environmentally friendly manner, and will help to protect the environment in which we all live.

Installing the ALTI

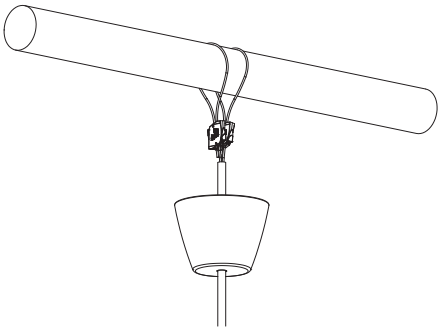
All–in–one cable & Gripple® connector

The ALTI speakers come with an unique All–in–one–wire, consisting of two steel cores for suspending the speaker and two copper conductors for connection of the amplifier to the loudspeaker. The copper conductors are provided with a colored (red / black) PVC jacket for polarity indication, while one of both steel cores also is provided with a coloring (red) for indicating the difference between both cores.

One side of the steel cores is terminated with two snap hooks for instant fixation, while the other side is having two open ends, which can be terminated through the Gripple® XP1™ keyless connectors. A standard connection cable with a length of 3.5 meter is included, while longer connection cables are optionally available. The open–end side allows shortening of the connection cable (if required).

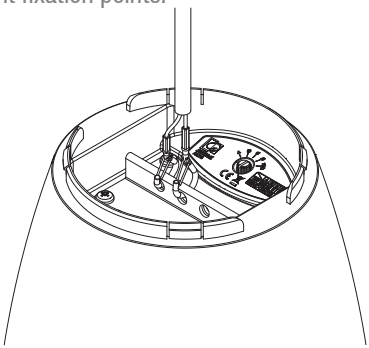


Depending on the ceiling structure and available fixation or rigging points, the All–in–one wire can be used in two directions. If for example an eye–bolt is provided on the ceiling side, the snap hooks can be hung onto the eye–bolt, while the open ends are on the speaker side and terminated using the Gripple® connectors. If the speaker has to be mounted on a beamed structure on the ceiling side, the open ends can be fixed around the beams, while the snap hooks are on the speaker side.



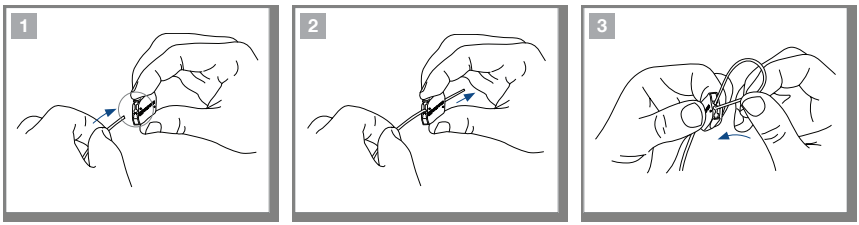
The ALTI speakers are delivered with a ceiling cover, which covers the fixation points (snap hooks or Gripple® connectors) on the ceiling side, in case a clean finishing is required. Slide this ceiling cover over the connection cable first, before any connections or fixations are made.

One steel core of the All–in–one wire is slightly shorter (red marked) which is the main suspension wire while the other one is the additional drop safety. The main suspension wire has to be fixed to the central position on the speaker, while the additional drop safety has to be fixed to one of the other fixation holes. On the ceiling side, both have to be fixed to independent fixation points.



NOTE

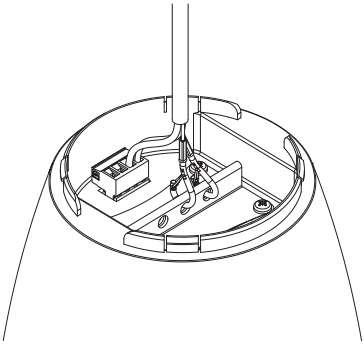
The combination of the All–in–one wire with the Gripple® connectors is tested and approved for being used with ALTI speakers and with a safety factor of at least 5:1. Installation has to be done in accordance with the instruction and with local regulations. Consult your local authorities in case of any doubt. When adjusting the length of the integrated steel cores, make sure the steel cores remain unharmed.



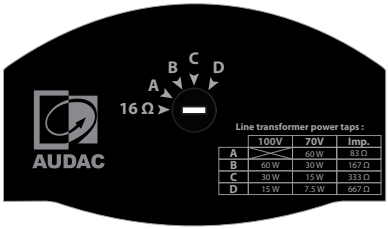
Above illustrations give an overview how the Gripple® connectors shall be used. Feed–through the steel wire from one side though the Gripple® connector, and pull it through. Create a loop with the steel wire around the fixation or rigging point whereto the speaker should be suspended and then feed–through the steel wire once again through the Gripple® connector. Pull–through the steel cable on the other end once again. Make sure the cable is fully fed–through the connector and verify the safe connection and suspension first.

Connecting the speaker

For connecting the ALTI, the wires coming from the amplifier shall be connected to the 4–pin terminal block connector on the rear of the speaker. Each connection terminal is implemented twice, allowing direct link–through to other loudspeakers on the same line. The polarity of the connector is indicated on the label which is attached to the rear side of the loudspeaker, and displayed in the below drawing.



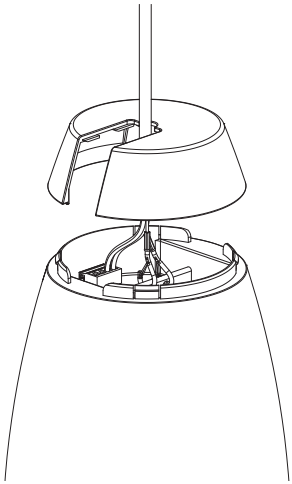
The selection of the power tapping and whether the speaker will be used in a low impedance (16Ω) or a constant voltage (70V/100V) system is made by means of a rotary selector switch. The switch can be rotated in 4 positions A, B, C & D. Each position cor–responds with a specific impedance / power setting indicated on a label attached to the speaker, and in the table below.



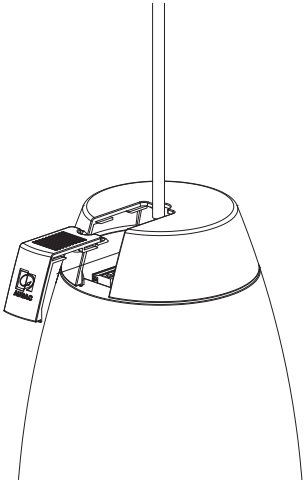
	ALTI4			ALTI6		
Tapping	**100V**	**70V**	**Imp.**	**100V**	**70V**	**Imp**
A	DO NOT USE	24 W	208 Ω	DO NOT USE	60 W	83 Ω
B	24 W	12 W	417 Ω	60 W	30 W	167 Ω
C	12 W	6 W	833 Ω	30 W	15 W	333 Ω
D	6W W	3 W	1667 Ω	15 W	7.5 W	667 Ω

Once the connections are made and the power taps are correctly set, the cover can be assembled on the rear section of the cabinet. The cover is designed with a sliding tab which can be removed, allowing it being assembled after the speaker is connected and suspended.

Position the cover on the rear of the cabinet, and it will click and latch in position.



Once assembled, the sliding tab can be inserted to the cover and can be slide into position, offering a nice and clean outlook of the cabinet.



Additional Information

Technical specifications

		ALTI4	ALTI6
Max Power		60 Watt	120 Watt
RMS Power		30 Watt	60 Watt
Nominal impedance		16 Ohm	16 Ohm
Line transformer taps		208 Ω – 70V/24W	83 Ω – 70V/60W
		417 Ω – 100V/24W – 70V/12W	167 Ω – 100V/60W – 70V/30W
		833 Ω – 100V/12W – 70V/6W	333 Ω – 100V/30W – 70V/15W
		1667 Ω – 100V/6W – 70V/3W	667 Ω – 100V/15W – 70V/7.5W
Sensitivity 1W/1m		80 dB	83 dB
Sound pressure Max W / 1m		95 dB	101 dB
Frequency response (±3 dB)		85 Hz – 20 kHz	75 Hz – 20 kHz
Frequency range (–10 dB)		65 Hz – 20 Hz	61.5 Hz – 20 Hz
Drivers		1" HF dome tweeter	1" HF dome tweeter
		4" MF/LF woofer	6.5" MF/LF woofer
Cross–over network		Passive built–in	Passive built–in
Connectors		4–pin Terminal block (5.08 mm)	4–pin Terminal block (5.08 mm)
Connection		All–in–one connection cable	All–in–one connection cable
Connection cable length		3.5m	3.5m
Mounting & handling		Dual snap hook & Gripple® XP1	Dual snap hook & Gripple® XP1
Construction		Polypropylene housing	Polypropylene housing
Front finish		Fine perforated aluminum grill	Fine perforated aluminum gril
Ingress protection		IP3x	IP3x
Operation temperature range		–20°C to +50°C	–20°C to +50°C
Colour	White	ALTI4/W (RAL9003)	ALTI6/W (RAL9003)
	Black	ALT4/B (RAL9005)	ALTI6/B (RAL9005)
Dimensions (Ø x H)		170 x 223 mm (excl. cable)	230 x 302 mm (excl. cable)
Weight		1.5 Kg	4 Kg

Packaging Shipping weight & Volume	Carton box 1.69 Kg – 0.014 Cbm	Carton box 4.25 Kg – 0.034 Cbm
Accessories included	4–pin terminal block connector 3.5 m All–in–one cable 2 x Gripple® XP1 connector Ceiling cover accessory	4–pin terminal block connector 3.5 m All–in–one cable 2 x Gripple® XP1 connector Ceiling cover accessory
Optional accessories	DSC70 All–in–one cable 7m DSC100 All–in–one cable 10m	DSC70 All–in–one cable 7m DSC100 All–in–one cable 10m

Notes