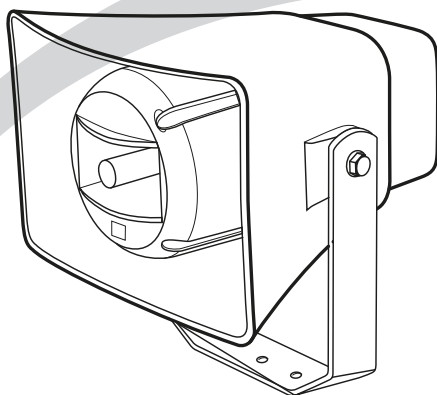


CHA530/660

User & Installation

Manual



www.audac.eu

Introduction

2–Way Horn loudspeakers

The CHA530/660 are 2–way horn loaded loudspeakers designed for long–throw, full range reproduction of music and speech in a wide variety of indoor and outdoor applications.

The construction is composed of a 1” high frequency compression driver and a mid/low frequency driver. The selection of high–quality components and acoustic engineering craftsmanship makes them significantly better performing than other traditional horn speakers. A smooth frequency response and high efficiency ensures an extraordinary clarity of speech and extended frequency response for music.

The enclosure is constructed using high quality UV and impact resistant ABS materials and a powder coated steel mounting bracket allows secure mounting and tilting for perfect directional placement. This makes it comply with IP66 ingress protection requirements, resulting in a weatherproof solution for permanent outdoor installation.

A multi–tapping line transformer allows the speaker to be used in 70V and 100V public address systems. It is connected using a waterproof rotatable AWX–5 connector whereby the desired power tap is selected depending on the rotation of the connector.

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
- DO NOT INSTALL THIS UNIT NEAR ANY HEAT SOURCES SUCH AS RADIATORS OR OTHER APPARATUS THAT PRODUCE HEAT
- 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.
- ALWAYS FOLLOW THE LOCAL REGULATIONS AND REQUIREMENTS REGARDING INSTALLATION, SUSPENSION AND CONNECTION OF THIS LOUDSPEAKER. EVEN WHEN OTHERWISE SPECIFIED IN THIS DOCUMENT.
- THE INSTALLATION OF THIS LOUDSPEAKER SHALL BE DONE BY QUALIFIED PERSONNEL ONLY.
- USE THE APPARATUS ONLY IN MODERATE CLIMATES

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 household waste at the end of its product life. This regulation is created to protect both the environment and human health.

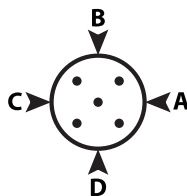
This product is developed and manufactured with high quality materials and components which can be recycled and/or reused. Please dispose this product to your local collection point or recycling centre for electrical and electronic waste. This will make to sure that it will be recycled on an environmentally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

Installing the loudspeaker

The CHA530/660 horn loudspeakers are designed for use in 70V and 100V public address systems. Before connecting the loudspeakers to the system, make sure the amplifier is switched off.

A 5-pin waterproof AWX-5 connector is located on the rear cover of the speaker, allowing connection to the amplifier output using the included connection cable (AWC07) with a length of 0.7 meter. The blue conductor shall always be connected to the COM terminal of the amplifier output and red conductor shall always be connected to the positive terminal of the amplifier output. Mind the polarity markings when wiring the loudspeaker cables.

The power tap selection is made by adjusting the rotation angle of the waterproof connector. A dot on the connector indicates the direction of the connector and the various power tapings are indicated on a label attached to the speaker and in the image below.



CHA530				CHA660			
Tapping	100V	70V	Imp.	Tapping	100V	70V	Imp
A	Do not use	30W	167 Ω	A	Do not use	60W	83 Ω
B	30W	15W	333 Ω	B	60W	30W	167 Ω
C	15W	7.5W	667 Ω	C	30W	15W	333 Ω
D	7.5W	3.75W	1333 Ω	D	15W	7.5W	667 Ω

After the connector is correctly plugged into the socket, make sure the screw nut is well tightened to guarantee the IP66 waterproof performance of the loudspeaker.

When mounting the speaker to any wall or ceiling, make sure the mounting surface can structurally support the weight of the speaker and the appropriate fasteners are used depending of the mounting surface. (brick, wood, concrete, ...)

Additional Information

Technical specifications

	CHA530	CHA660
Max Power	60 Watt	120 Watt
RMS Power	30 Watt	60 Watt
Line Transformer Taps	167 Ω – 70V/30W 333 Ω – 100V/30W – 70V/15W 667 Ω – 100V/15W – 70V/7.5W 1.33 k Ω – 100V/7.5W – 70V/3.75W	83 Ω – 70V/60W 167 Ω – 100V/60W – 70V/30W 333 Ω – 100V/30W – 70V/15W 667 Ω – 100V/15W – 70V/7.5W
Sensitivity (1W/1m)	98 dB	99 dB
Sound Pressure (Max W/1m) @ 100 V	113 dB	116 dB
Frequency response (\pm 3 dB)	110 Hz – 16 kHz	100 Hz – 16 kHz
Drivers	1" HF Horn tweeter 5" MF / LF Woofer	1" HF Horn tweeter 6.5" MF / LF Woofer
Connectors	AWX–5 Waterproof	AWX–5 Waterproof
Mounting bracket	Powder coated steel (included)	Powder coated steel (included)
Construction	Impact resistant ABS	Impact resistant ABS
Ingress Protection	IP66	IP66
Operation temperature range	–20 °C to +50 °C	–20 °C to +50 °C
Coverage	Horizontal 110° Vertical 60°	100° 60°
Colour	Light grey (RAL7035)	Light grey (RAL7035)
Dimensions (W x H x D)	310 x 215 x 330 mm	420 x 335 x 400 mm
Weight	4.7 Kg	6.7 Kg
Packaging	Carton box	Carton box
Shipping weight & Volume	6 Kg – 0.04 Cbm	9 Kg – 0.07 Cbm
Accessories included		AWC07 connection cable (0.7 meter)
Optional accessories		AWCxx connection cables (various length)

