

# 2-Way horn loudspeaker 6.5

# Highlights:

- Multi-tapping 70V / 100V line transformer
- IP66 Ingress protection
- · 60 Watt RMS power
- · 6.5" Low frequency loudspeaker
- 1" HF Horn tweeter

#### Product information:

The CHA660 is a 2-way horn loaded loudspeaker which is 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 6.5" mid/low frequency driver. The selection of high-quality components and acoustic engineering craftmanship makes the CHA660 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.

It features an RMS power handling of 60 Watt and a max power handling of 120 Watt. The sensitivity measures 99 dB while a maximum continuous SPL of 116 dB can be achieved. The frequency response (±3 dB) starts from 100 Hz up to 16 kHz.

A multi-tapping line transformer allows the speaker to be used in 100 Volt and 70 Volt 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. Various power tappings for 60 Watt, 30 Watt, 15 Watt and 7.5 Watt are available.

The enclosure is constructed using high quality UV and impact resistant ABS materials and an included stainless 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.

# Applications:

- · Museums & Themeparks
- Events
- Retail
- Corporate
- Sporting facilities





#### Certification:



IP66

#### Properties:



Weatherproof

#### Voltage:



70-100 Volt



# System specifications:

Peak power handling         240 W           Program power handling         120 W           RMS/AES power handling         60 W           Inputs         Connector         -pin Euro Terminal block (Balanced)           Line Transformer Tappings         1         83 Ω - 100 V / Not used - 70 V / 60 W           Line Transformer Tappings         1         167 Ω - 100 V / 60 W - 70 V / 30 W           Line Transformer Tappings         3         333 Ω - 100 V / 30 W - 70 V / 15 W           Line Transformer Tappings         4         667 Ω - 100 V / 15 W - 70 V / 7.5 W           Sensitivity (1W/1m)         99 dB           Sound Pressure (Max. W/1m)         @ 100 V         116 dB           Frequency         Response (± 3 dB)         100 Hz - 16 kHz           Crossover         Type         Passive built-in           Dispersion         Horizontal         100°           Ingress Protection rating         Vertical         60°           Drivers         HF         1"HF Horn tweeter           Drivers         1"HF Horn tweeter           6.5" MF / LF Woofer			
Program power handling         120 W           RMS/AES power handling         60 W           Inputs         Connector         -pin Euro Terminal block (Balanced)           Line Transformer Tappings         1         83 Ω - 100 V / Not used - 70 V / 60 W           Line Transformer Tappings         1         167 Ω - 100 V / 60 W - 70 V / 30 W           Line Transformer Tappings         3         333 Ω - 100 V / 30 W - 70 V / 15 W           Line Transformer Tappings         4         667 Ω - 100 V / 15 W - 70 V / 7.5 W           Sensitivity (1W/1m)         99 dB           Sound Pressure (Max. W/1m)         @ 100 V         116 dB           Frequency         Response (± 3 dB)         100 Hz - 16 kHz           Crossover         Type         Passive built-in           Dispersion         Horizontal         100°           Ingress Protection rating         Vertical         60°           Drivers         HF         1" HF Horn tweeter           Drivers         HF         1" HF Horn tweeter	Speaker type		2-way horn speaker
RMS/AES power handling         60 W           Inputs         Connector         -pin Euro Terminal block (Balanced)           Line Transformer Tappings         1         83 Ω - 100 V / Not used - 70 V / 60 W           Line Transformer Tappings         1         167 Ω - 100 V / 60 W - 70 V / 30 W           2         167 Ω - 100 V / 60 W - 70 V / 30 W           3         333 Ω - 100 V / 30 W - 70 V / 15 W           Sensitivity (1WV1m)         99 dB           Sound Pressure (Max. W/1m)         @ 100 V         116 dB           Frequency         Response (± 3 dB)         100 Hz - 16 kHz           Crossover         Type         Passive built-in           Dispersion         Horizontal         100°           Ingress Protection rating         Vertical         60°           Drivers         HF         1" HF Horn tweeter           6.5" MF / LF Woofer	Peak power handling		240 W
Inputs         Connector         -pin Euro Terminal block (Balanced)           Line Transformer Tappings         1         83 Ω - 100 V / Not used - 70 V / 60 W           Line Transformer Tappings         1         167 Ω - 100 V / 60 W - 70 V / 30 W           Line Transformer Tappings         3         333 Ω - 100 V / 30 W - 70 V / 75 W           Line Transformer Tappings         4         667 Ω - 100 V / 15 W - 70 V / 7.5 W           Sensitivity (1W/1m)         99 dB           Sound Pressure (Max. W/1m)         @ 100 V         116 dB           Frequency         Response (± 3 dB)         100 Hz - 16 kHz           Crossover         Type         Passive built-in           Dispersion         Horizontal         100°           Ingress Protection rating         Vertical         60°           Drivers         HF         1" HF Horn tweeter           Drivers         HF HF Horn tweeter         6.5" MF / LF Woofer	Program power handling		120 W
Line Transformer Tappings         1         83 Ω - 100 V / Not used - 70 V / 60 W           Line Transformer Tappings         2         167 Ω - 100 V / 60 W - 70 V / 15 W           Line Transformer Tappings         3         333 Ω - 100 V / 30 W - 70 V / 15 W           Line Transformer Tappings         4         667 Ω - 100 V / 15 W - 70 V / 7.5 W           Sensitivity (1W/1m)         99 dB           Sound Pressure (Max. W/1m)         @ 100 V         116 dB           Frequency         Response (± 3 dB)         100 Hz - 16 kHz           Crossover         Type         Passive built-in           Dispersion         Horizontal         100°           Ingress Protection rating         Vertical         60°           Drivers         HF         1" HF Horn tweeter           Drivers         HF         1" HF Horn tweeter	RMS/AES power handling		60 W
2   167 Ω - 100 V / 60 W - 70 V / 30 W     3   333 Ω - 100 V / 30 W - 70 V / 15 W     4   667 Ω - 100 V / 15 W - 70 V / 7.5 W     5   5   667 Ω - 100 V / 15 W - 70 V / 7.5 W     5   6   6   6   6   6     5   6   6   6     6   6   6     6   6     6   6	Inputs	Connector	-pin Euro Terminal block (Balanced)
3   333 Ω - 100 V / 30 W - 70 V / 15 W     4   667 Ω - 100 V / 15 W - 70 V / 7.5 W     5   667 Ω - 100 V / 15 W - 70 V / 7.5 W     5   667 Ω - 100 V / 15 W - 70 V / 7.5 W     5   667 Ω - 100 V / 15 W - 70 V / 7.5 W     6   607 Ω - 100 V / 15 W - 70 V / 7.5 W     6   608	Line Transformer Tappings	1	83 Ω - 100 V / Not used - 70 V / 60 W
Sensitivity (1W/1m) Sensitivity (1W/1m) Sound Pressure (Max. W/1m) Sound P		2	167 Ω - 100 V / 60 W - 70 V / 30 W
Sensitivity (1W/1m) Sound Pressure (Max. W/1m)  Response (± 3 dB)  Type Passive built-in  Pispersion  Horizontal  Vertical  O°  Ingress Protection rating  HF  HF  Type  HF  Type  HF  Type  Response (± 3 dB)  100 Hz - 16 kHz  Passive built-in  100°  100°  110		3	333 Ω - 100 V / 30 W - 70 V / 15 W
Sound Pressure (Max. W/1m)  @ 100 V  116 dB  frequency  Response (± 3 dB)  100 Hz - 16 kHz  Crossover  Type  Passive built-in  Dispersion  Horizontal  Vertical  60°  Ingress Protection rating  Drivers  HF  HF  1" HF Horn tweeter  6.5" MF / LF Woofer		4	667 Ω - 100 V / 15 W - 70 V / 7.5 W
Frequency Response (± 3 dB) 100 Hz - 16 kHz Crossover Type Passive built-in Dispersion Horizontal 100° Vertical 60° Ingress Protection rating Drivers HF 1" HF Horn tweeter 6.5" MF / LF Woofer	Sensitivity (1W/1m)		99 dB
Crossover Type Passive built-in  Dispersion Horizontal 100°  Vertical 60°  Ingress Protection rating IP66  Drivers HF 4 1" HF Horn tweeter 6.5" MF / LF Woofer	Sound Pressure (Max. W/1m)	@ 100 V	116 dB
Dispersion Horizontal 100°  Vertical 60°  Ingress Protection rating IP66  Drivers HF 1" HF Horn tweeter 6.5" MF / LF Woofer	Frequency	Response (± 3 dB)	100 Hz - 16 kHz
Vertical 60°  Ingress Protection rating IP66  Drivers HF 1" HF Horn tweeter 6.5" MF / LF Woofer	Crossover	Туре	Passive built-in
Ingress Protection rating  Drivers  HF  1" HF Horn tweeter  6.5" MF / LF Woofer	Dispersion	Horizontal	100°
Drivers HF 1" HF Horn tweeter 6.5" MF / LF Woofer		Vertical	60°
6.5" MF / LF Woofer	Ingress Protection rating		IP66
	Drivers	HF	1" HF Horn tweeter
Connection AWX5™ waterproof			6.5" MF / LF Woofer
	Connection		AWX5™ waterproof

# **Product Features:**

Dimensions		420 x 335 x 400 mm (W x H x D)
Weight		6.7 kg
Construction		Impact & UV resistant ABS
Colours		Light grey (RAL7035)
Mounting & handling		Powder coated steel
Accessories	Included	Mounting bracket

## Shipping & Ordering:

Packaging	Cardboard box
Shipping weight & volume	9 kg - 0.07 Cbm

# Architects' and Engineers' Specifications:

The loudspeaker shall be a 2-way horn loaded system, providing a long-throw full range sound projection of music and speech. The construction shall be composed of a 1" HF compression driver and a 6.5" mid/low frequency driver which are housed in a impact and UV resistant ABS housing. It shall have an RMS power handling of 60 Watt with a maximum power handling of 120 Watt and the frequency response (±3 dB) shall range from 100 Hz to 16 kHz. The sensitivity shall be 99 dB when measuring with an input signal of 1 Watt at a distance of 1 meter, while the maximum continuous sound pressure level shall achieve 116 dB. The loudspeaker shall contain a passive built-in crossover network. For use in public address systems, a multi-tapping 100 Volt built-in line transformer with power taps for 60 Watt, 30 Watt, 15 Watt and 7.5 Watt shall be provided. Connecting the loudspeaker is done through a screw terminal block connector in a waterproof connection box on the rear of the speaker. An included steel mounting bracket allows a secure mounting and optimal directional placement. A truly weatherproof construction complying with IP66 Ingress protection requirements shall be met. The system's enclosure shall be 335 mm high, 420 mm wide and 400 mm deep and the weight shall not exceed 6.7 Kg.

## Horizontal Polars:



