

# D A S ACTION 12 Passive Full Range User Manual

Home » D A S » D A S ACTION 12 Passive Full Range User Manual



Before operating the device, please read the "Safety precautions" section of this manual. Retain this manual for future reference.

### **Contents**

- **1 Safety Precautions**
- **2 WARRANTY**
- **3 DECLARATION OF**
- **CONFORMITY**
- **4 INTRODUCTION**
- **5 CONFIGURATIONS**
- **6 RIGGING**
- **7 LINE DRAWINGS**
- **8 SPECIFICATIONS**
- 9 Documents / Resources
  - 9.1 References

# **Safety Precautions**

Passive loudspeaker enclosures

⚠Keep these instructions.

Heed all warnings. Follow all instructions.

The exclamation point inside an equilateral triangle indicates the existence of internal components whose

substitution may affect safety.

The double square indicates Class II device.
The specifications can be found on the rear label of the product.

The appliance should be flown only from the rigging points and by qualified personnel. Do not suspend the box from the handles.

Do not expose this device to rain or moisture. Do not place any objects containing liquids, such as bottles or glasses, on the top of the unit. Do not splash liquids on the unit. IP-20 equipment.

This symbol on the product indicates that this product should not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Working temperature ranges from 15°C to 35°C with a relative humidity of 75%.

The outer wiring connected to the device requires installation by an instructed person or the use of a flexible cable already prepared.

Note that the two Speak on input connectors are wired in parallel to provide easy parallel connection of several enclosures.

Do not place loudspeakers in proximity to devices sensitive to magnetic fields such as television monitors or data storage magnetic material.

For enclosures with tripod socket, the maximum safety height from floor to bottom of enclosure when mounting on a TRD-2 tripod, with legs spread 55cm from the central pole, is:



action-8- ---->125 cm action-12 ----->115 cm action-15 ---->105 cm

No user serviceable parts inside. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

Clean only with a dry cloth. Do not use any solvent based cleaners.

### **WARRANTY**

All D.A.S. products are warrantied against any manufacturing defect for a period of 2 years from date of purchase. The warranty excludes damage from incorrect use of the product.

All warranty repairs must be exclusively undertaken by the factory or any of its authorised service centers.

To claim a warranty repair, do not open or intend to repair the product.

Return the damaged unit, at shippers risk and freight prepaid, to the nearest service center with a copy of the

purchase invoice.

#### **DECLARATION OF CONFORMITY**

### D.A.S. Audio, S.A.

Declares that passive action series:
Abide by essential objectives relating Directives:

- Directiva de Baja Tensión (Low Voltage Directive) 2014/35/UE
- Directiva RoHS 2011/65/UE
- Directiva RAEE (WEEE) 2012/19/UE

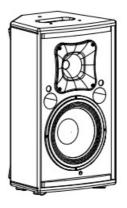
In accordance with Harmonized European Norms:

- EN 60065:2014.- Audio, video and similar electronic apparatus. Safety requirements.
- EN 50581:2012.- Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

### **INTRODUCTION**

The action series inherits the exceptional sound quality and rugged build that have made D.A.S. professional systems an internacional sound reinforcement standard. Designed from "real-world" experience, they offer users outstanding performance, absolute reliability, and unparalleled convenience. Whether it is in a high-profile venue or on the stage of a major event, the action series will provide the power and definition needed to make your performance a success.

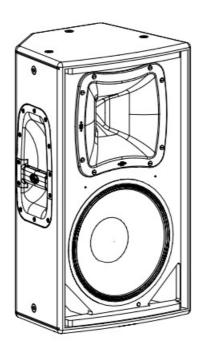
#### **Features**



#### action 8

- · 2-way, full-range system
- 8" bass loudspeaker
- · Compression driver
- · Asymmetric enclosure design for stage monitor use
- · Built-in rigging points
- · Stand mountable

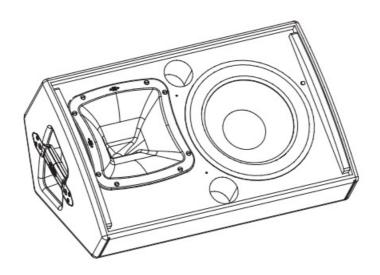
The action 8 is a compact 2-way passive full-range loudspeaker that utilizes a 8" low frequency transducer and a full compression driver. The multi-angle cabinet is constructed of Birch plywood protected by an enviormentally friendly ISO-flex black paint finish. A rear located handle and a robust steel grille are provided. A 35 mm tripod socket allows for stand mounting.



### action 12

- Two-way full-range system
- 12" bass loudspeaker
- Compression driver with titanium diaphragm
- · Asymmetric enclosure design for stage monitor use
- Built-in rigging points (eyebolt based)
- · Stand mountable

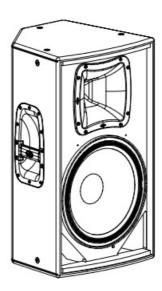
The action 12 is a 2-way passive full-range loudspeaker that utilizes a 12" low frequency transducer and a 1" exit compression driver. The multi-angle cabinet is constructed of Birch plywood protected by an environmentally friendly black paint finish. Two bar handles and a steel grille are provided. A 35mm tripod socket allows for stand mounting.



#### action M12

- · Dedicated stage monitor
- 12" bass loudspeaker
- Compression driver with titanium diaphragm
- Low profile enclosure design for minimum visual impact
- · Black paint finish
- · Stand mountable

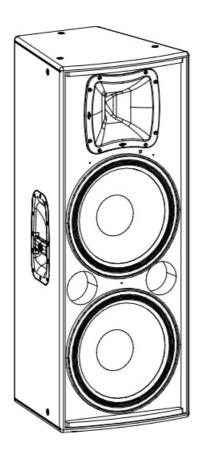
The action M12 is a dedicated stage monitor designed for use with external amplification. The enclosure is constructed from Birch plywood and is protected with a black paint finish. Two side located handles facilitate handling and a steel grille protects the components. A pole mount socket adds versatility to the action M12.



#### action 15

- · Two-way, full-range system
- 15" bass loudspeaker
- Compression driver with titanium diaphragm
- · Asymmetric enclosure design for stage monitor use
- Built-in rigging points (eyebolt based)
- · Stand mountable

This 2-way passive full-range loudspeaker utilizes a 15" low frequency transducer and a 1" exit compression driver with titanium diaphragm. The cabinet is constructed of Birch plywood and finished with an environmentally friendly black paint finish. Two bar handles are provided and a steel grille protects components. A 35 mm tripod socket allows for stand mounting. Rigging points provide a safe and simple solution for suspending the action 15.

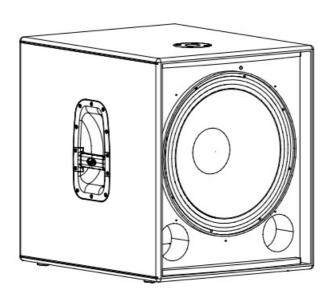


#### action 215

- · 2-way, full-range system
- 2 x 15" bass loudspeaker
- Compression driver with titanium diaphragm
- Two steel-reinforced handles

The action 215 is a 2-way passive full range loudspeaker utilizes two 15" bass loudspeakers for extra low frequency punch and higher SPL.

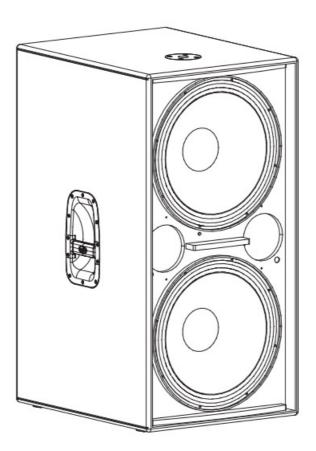
High frequencies are handled by a 1" compression driver with titanium diaphragm. The trapezoidal cabinet is constructed using Birch plywood and protected with a hard-wearing black paint finish. Two bar handles and a steel grille sealed against corrosion using a polyamide powder coat finish are provided. Rigging points provide a safe and simple way to fly the action 215 cabinets.



#### action 18

- · Bass-reflex subwoofer system
- 18" low frequency transducer
- · Precise and powerful bass reproduction
- · Top located pole mount socket

The action 18 bass system incorporates a 18" low frequency transducer with a 4" voice coil mounted as a direct radiator into a bass reflex cabinet. The loudspeaker is protected by a perforated steel grille, sealed against corrosion using a powder coat finish. The action 18 is designed for use in beamed systems. A top located polemount socket permits mounting full-range systems above the action 18 and two bar handles makes moving easy.

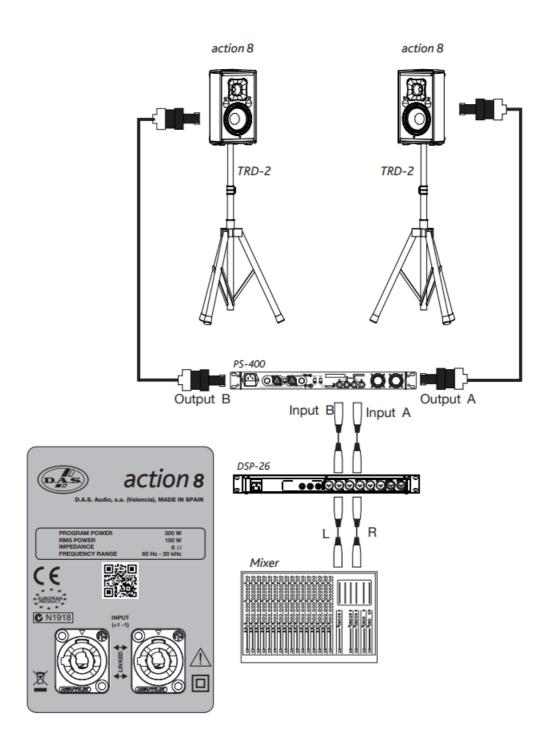


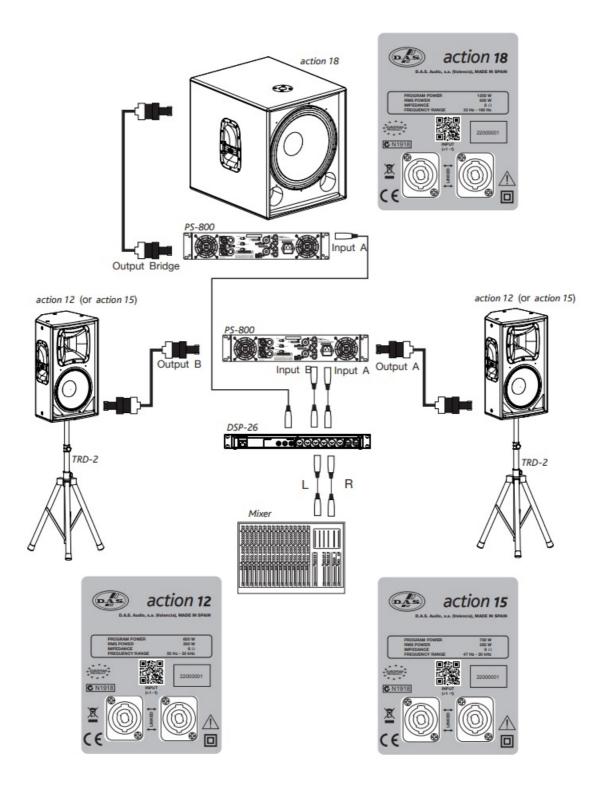
### action 218

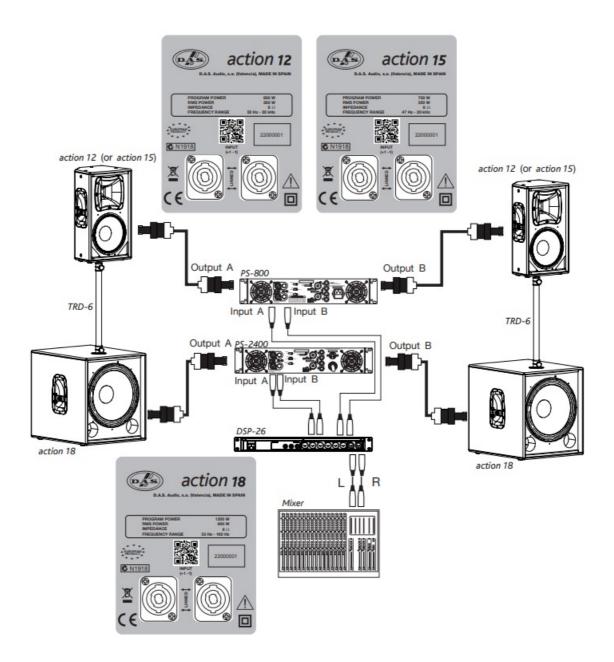
- High output bass-reflex subwoofer system
- Twin 18" loudspeakers
- · Durable black paint finish
- · Side located bar handles

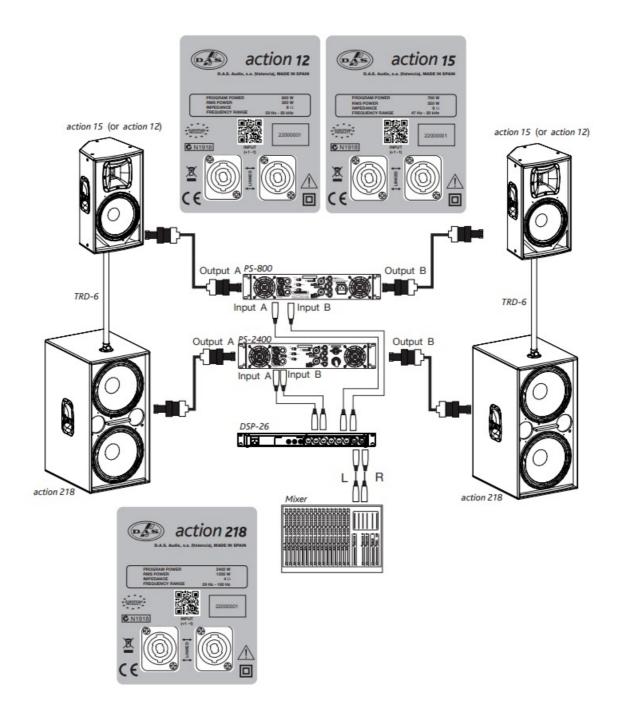
This high power bass-reflex subwoofer system uses dual 18" bass loudspeakers equipped with 4" voice coils. The exceptional power handling capacity and efficiency provide high sound pressure levels of powerful bass. Two hand locations facilitate handling. The cabinet is designed to be stacked in the vertical position in order to reduce the units "on-stage" footprint.

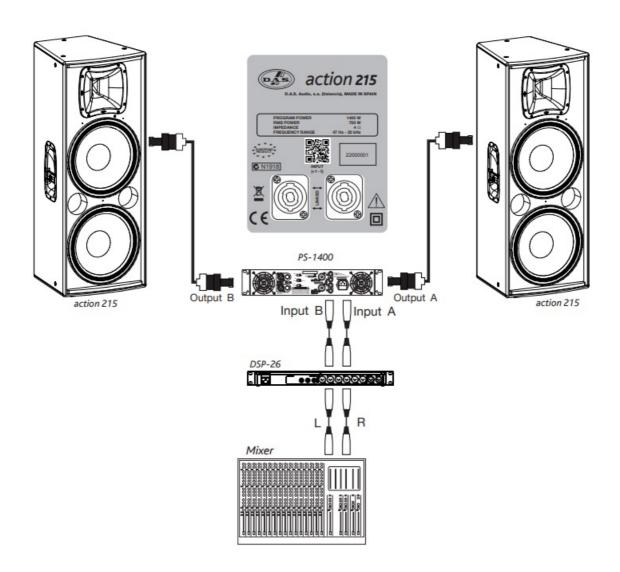
### **CONFIGURATIONS**

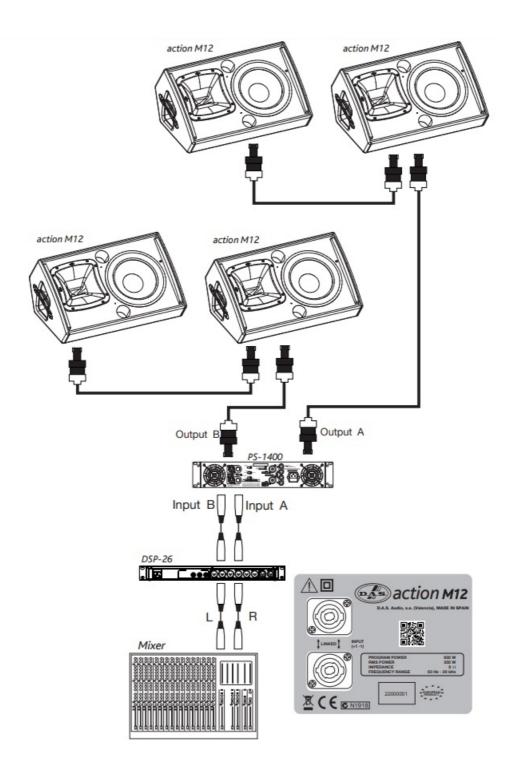












### **RIGGING**

### Warnings

This manual contains needed information for flying D.A.S. Audio line array systems, description of the elements and safety precautions. To perform any operations related to flying the system, read the present document first, and act on the warnings and advice given. The goal is to allow the user to become familiar with the mechanical elements required to fly the acoustic system, as well as the safety measures to be taken during set-up and teardown.

Only experienced installers with adequate knowledge of the equipment and local safety regulations should fly speaker boxes. It is the user's responsibility to ensure that the systems to be flown (including flying accessories) comply with

state and local regulations.

The working load limits in this manual are the results of tests by independent laboratories. It is the user's responsibility to stay within safe limits. It is the user's responsibility to follow and comply with safety factors, resistance values, periodical supervisions and warnings given in this manual. Product improvement by means of research and development is on going at D.A.S. Specifications are subject to change without notice.

To this date, there is no international standard regarding the flying of acoustic systems. However, it is common

practice to apply 5:1 safety factors for enclosures and static elements. For slings and elements exposed to material fatigue due to friction and load variation the following ratios must be met; 5:1 for steel cable slings, 4:1 for steel chain slings and 7:1 polyester slings. Thus, an element with a breaking load limit of 1000 kg may be statically loaded with 200 kg (5:1 safety factor) and dynamically loaded with 142 kg (7:1 safety factor).

When flying a system, the working load must be lower than the resistance of each individual flying point in the enclosure, as well as each box.

Hanging hardware should be regularly inspected and suspect units replaced if in doubt. This is important to avoid injury and absolutely no risks should be taken in this respect. It is highly recommended that you implement an inspection

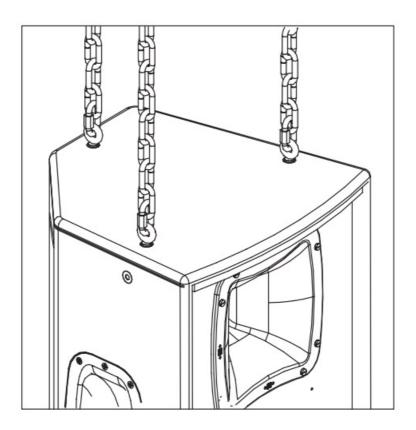
and maintenance program on flying elements, including reports to be filled out by the personnel that will carry out the inspections. Local regulations may exist that, in case of accident, may require you to present evidence of inspection reports and corrective actions after defects were found.

Absolutely no risks should be taken with regards to public safety. When flying enclosures from ceiling support structures, extreme care should be taken to assure the load bearing capabilities of the structures so that the installation is absolutely safe. Do not fly enclosures from unsafe structures. Consult a certified professional if needed. All flying accessories that are not supplied by D.A.S. Audio are the user's responsibility. Use at your own risk.

#### Introduction

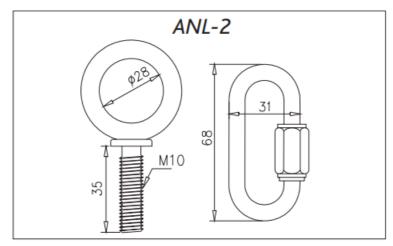
Flyable action series models feature 6 internal steel angles, with 2 mounting threads each, so that 12 flying points are available (2 on each side, 3 on the top panel and 3 on the bottom panel and 2 on the rear panel). Eyebolt flying points are factory sealed with M10 screws, which are replaced with eyebolts on the flying points as required. Flying with eyebolts is very economical and safe, and is specially recommended for fixed installations where the boxes are permanently

fixed. The illustration shows the internal metal hardware of an enclosure with eyebolt flying.



### Flying with eyebolts

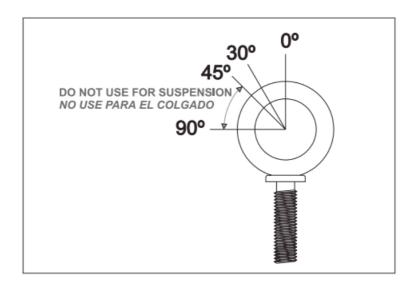
The Allen-head screws must be removed and replaced by M10 eyebolts on one side of the enclosure. Each rigging point has 200 kg (440 lb) working load limit. Then choose the slings or chains of required load resistance and length, bearing in mind that the length difference between the front and back slings or chains will determine the vertical orientation. Alternatively, the back bottom eyebolt points can be used to provide vertical orientation. The ANL-2 set is an optional set of three eyebolts and three carabiners. (Dimensions are in milimetres).



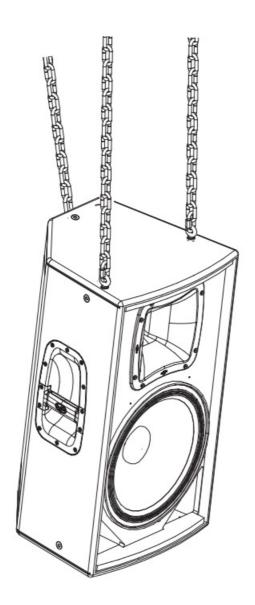
Each ANL-2 eyebolt has a rated working load of 200 kg. (440 lb). Each ANL-2 carabiner has a working load of 330 kg (726 lb). If using other hardware, make sure it is rated to handle the required load.

When using eyebolts it is important to bear in mind that the rated working load is only true for a load applied in the plane of the eye, and is significantly reduced for other angles. The drawing illustrates the concept. The table shows the variation of the working load as a function of the load angle. In the case of the ANL-2 eyebolt, this means that the 200 kg working load becomes 60 kg at 45 degrees. Do not use eyebolt flying if the load angle is higher than 45 degrees.

	0 Degrees	30 Degrees	45 Degrees	More than 45 Degrees
% Working load	100%	65%	30%	25%



The following illustrations show different views on eyebolt flying for a single box. The length of the back cables or chains determines the vertical angle of the box.



Instructions for AXU-AC8 (only Action8)

### Introduction

The AXU series are designed for enclosures Action-8, Action-8A, and different versions.

### **Safety Precautions**

Wall plugs provided are to be used in brick walls only.

For other wall materials, source the suitable wall plug before use.

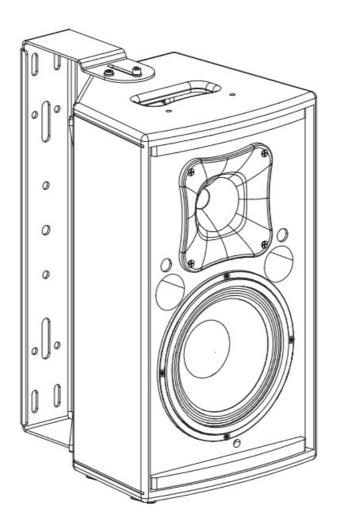
D.A.S. Audio is not responsible for use other than the recommended or whether it be the result of insufficient strength of the support structure. Use only the screws and wall plugs supplied on surfaces that will provide sufficient support. Do not use on surfaces such as plaster, and gypsum. It is highly recommended and in most parts of the world mandatory, that a safety cable be used to secure the enclosure to the structure.

To ensure optimum safety, the installation should be checked thoroughly at regular intervals replacing all deteriorated elements.

Loosen the screws before reorienting the speaker.

Never force the rigging elements.

Contact a licensed rigger if there is any doubt.

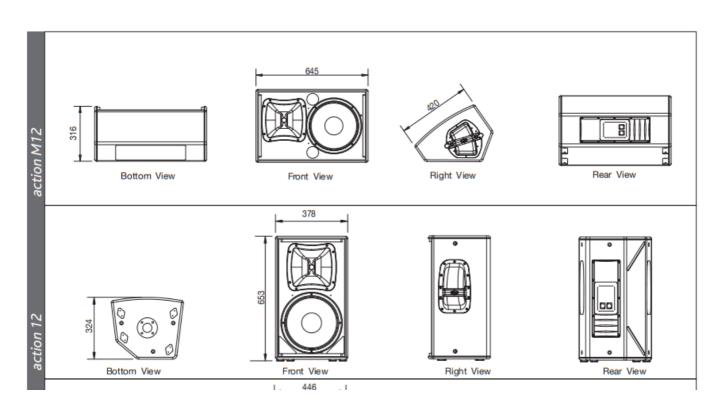


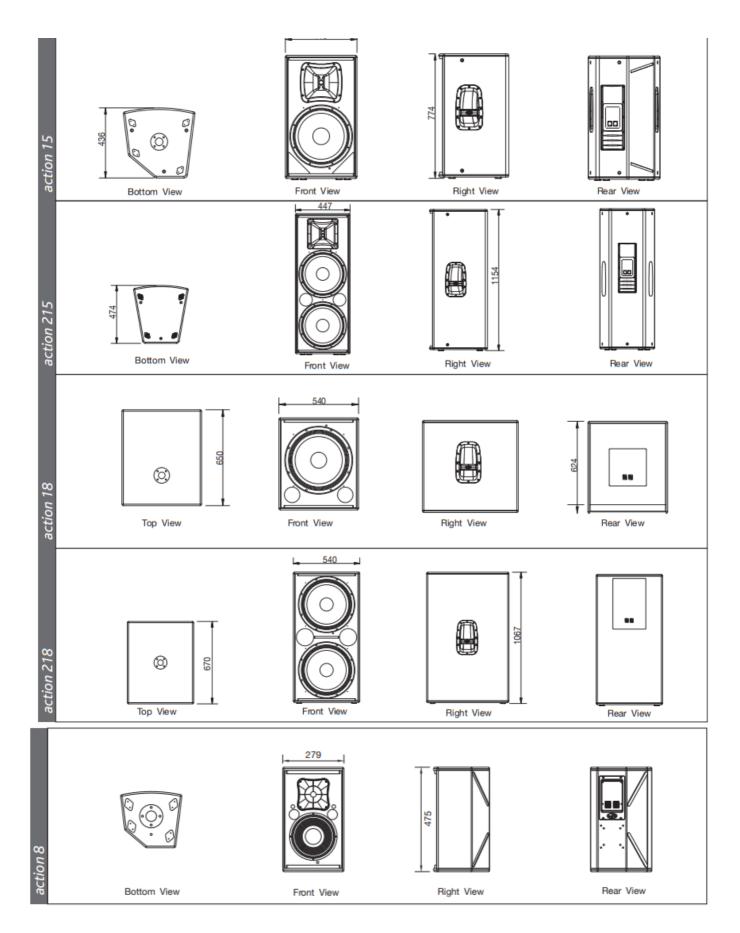
# **Mounting instructions**

You can consult the AXU-AC8 mounting instructions for enclosures Action 8A on the web: www.dasaudio.com

# **LINE DRAWINGS**

# **ALL DIMENSIONS IN MILIMETERS**





### **SPECIFICATIONS**

Model	action 8	action M12	action 12	
Peak Power Handling (-10 d B)	600 W	1200 W	1200 W	
RMS Power Handling (1)	150 W	300 W	300 W	
Frequency Range (-10 dB)	60 Hz – 20kHz	63 Hz – 20kHz	50 Hz – 20kHz	
HF Horn Coverage Angles(-6dB)	80º x 80º	80° x 50°	80° x 50°	
On-axis Sensitivity 1 W / 1m	92 dB SPL	95 dB SPL	96 dB SPL	
Rated Maximum Peak SPL (2)	120 dB	130 dB	131 dB	
Nominal Impedance	8 ohms	8 ohms	8 ohms	
Transducers/Replacement Parts	LF: 8B / 8B HF: M-26 / GM M-26	LF: 12Mi / GM 12Mi HF: M-34 / GM M-34	LF: 12Mi / GM 12Mi HF: M-34 / GM M-34	
Enclosure Material	Birch Plywood	Birch Plywood	Birch Plywood	
Color/Finish	Black Paint	Black Paint	Black Paint	
Connectors	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon	
Dimensions (H x W x D)	47.5 x 27.9 x 25.5 cm 18.7 x 11 x 10 in	42 x 64.5 x 31.6 cm 16.6 x 25.4 x 12.5 in	65.3 x 37.8 x 32.4 cm 25.7 x 14.9 x 12.8 in	
Weight	8.4 kg (18.5 lb)	17.5 kg (38.5 lb)	18.5 kg (40.7 lb)	
Accessories	AXW-1, TRD-2, TRD-6	TRD-2, TRD-6	ANL-2, TRD-2, TRD-6	

Model	action 15	action 215	action 18	action 218
Peak Power Handling (-10 dB)	1400 W	2800 W	2400 W	4800 W
RMS Power Handling (	350 W	80º x 50º	600 W	1200 W
Frequency Range (-10 dB)	47 Hz – 20kHz	47 Hz – 20kHz	33 Hz – 160 Hz	29 Hz – 160 Hz
HF Horn Coverage An gles(-6dB)	80º x 50º	700 W		
On-axis Sensitivity 1 W / 1m	96 dB SPL	99 dB SPL	96 dB SPL	99 dB SPL
Rated Maximum Peak SPL (2)	131 dB	134 dB	133 dB	139 dB
Nominal Impedance	8 ohms	4 ohms	8 ohms	4 ohms
Transducers/Replacem ent Parts	24.5 kg (53.9 lb) ANL-2, TRD-2, TRD-6	LF: 2 x 15Mi / GM 1 5Mi HF: M-44 / GM M-4 4	LF: 18H/GM 18G	LF: 2 x 18H / G M 18G
Enclosure Material	Birch Plywood	Birch Plywood	Birch Plywood	Birch Plywood
Color/Finish	Black Paint	Black Paint	Black Paint	Black Paint
Connectors	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speakon	2 x NL4 Speako n
Dimensions (H x W x D)	77.4 x 44.6 x 43.6 cm 30.5 x 17.6 x 17.2 in	115.4 x 44.7 x 47.4 cm 45.5 x 17.6 x 18.7 in	62.4 x 54 x 65 cm 24.6 x 21.3 x 25.6 in	106.7 x 54 x 67 cm 42 x 21.3 x 26.4 in
Weight	24.5 kg (53.9 lb)	38.5 kg (83.6 lb)	34.5 kg (75.9 lb)	61 kg (134.2 lb)
Accessories	ANL-2, TRD-2, TRD-6	ANL-2	TRD-6	TRD-6

(1) Based on a 2 hour test continuosly applying 6 dB crest factor pink noise (IEC shaped). UM\_ACT\_03\_EN



D.A.S. AUDIO, S.A. C/. Islas Baleares, 24 46988 Fuente del Jarro Valencia, SPAIN Tel. 96 134 0525 Tel. Intl. +34 96 134 0860

Fax 96 134 0607

Fax Intl. +34 96 134 0607

D.A.S. AUDIO OF AMERICA, INC. Sunset Palmetto Park 6816 NW 77th Court. Miami, FL. 33166 - U.S.A. TOLL FREE: 1-888DAS4USA

Tel. +1 305 436 0521 Fax +1 305 436 0528

D.A.S. AUDIO ASIA PTE. LTD. 25 Kaki Bukit Crescent #01-00/02-0 Kaki Bukit Techpark 1 Singapore 416256 Tel. +65 6742 0151 Fax +65 6742 0157

### **Documents / Resources**



D A S ACTION 12 Passive Full Range [pdf] User Manual ACTION 12 Passive Full Range, ACTION 12, Passive Full Range, Full Range, Range

### References

• User Manual

# Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.