# USER MANUAL

AX800A
active vertical array loudspeaker

KEY FEATURES

- Compact lightweight moulded enclosure
- WTW driver configuration
- Dual 8" woofers, 1.4" HF compression driver
- High quality, low distortion, compression driver design
- Acoustic filter control for stable 100° horizontal coverage
- Linear phase, constant power crossover design

- Transmission Line back loading for clean mid-bass reproduction
- Natural sound Transmission Line HF projection wave-forming device
- 96KHz / 40 bit floating point CORE processing with PRONET remote control
- Array optimized presets
- Class D amplifier module with SMPS
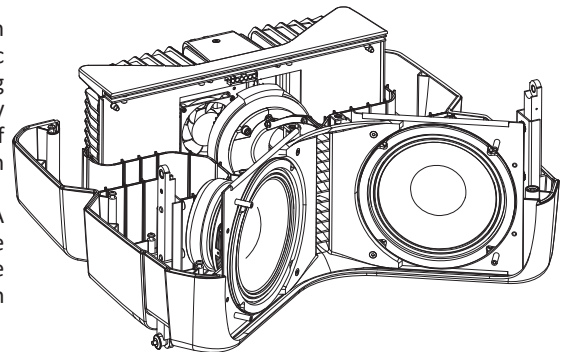- Easy-to-use rigging system

INTRODUCTION

The AX800A has been developed with total optimization of the speaker components in mind – from the lightweight woofer cone materials through to the titanium diaphragm used in the high frequency compression driver. They've been developed in close cooperation with our supply partners, who act in many ways as an extension of our R&D acoustics team.
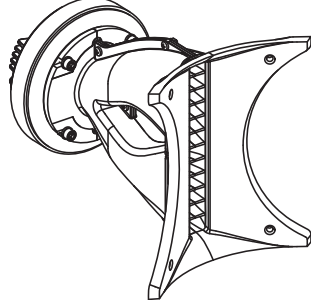
Housing two eight-inch low frequency drivers, which are transmission line back-loaded for a significant reduction in low range frequencies at the rear of the speaker, the AX800A delivers natural cardioid behaviour and therefore clean mid-bass reproduction. This is especially important in preventing the "boxy" mid-bass sound commonly obtained from regular bass-reflex enclosures, or the build up of excessive low-mid frequencies behind an array and on stage that can be annoying for performers.

Completing the driver complement is a 1.4-inch titanium diaphragm compression driver loaded by an acoustic transmission line waveguide providing natural sounding high frequencies. The components are arranged in a very compact WTW driver configuration, which lends itself to correct line array behaviour, providing wide and even horizontal coverage of any venue or audience space.

The AX800A is processed by 40bit, 96kHz floating point CORE DSP and powered by DA SERIES class D amplifier modules, with audio quality that is comparable to some of the best analogue Class A-B designs. The output power is optimized specifically to the drive units, sharing 900 watts between both woofers and delivering 300 watts to the high frequency band.

TECHNICAL SPECIFICATION

SYSTEM

System's Acoustic Principle	Line Array Element Short Transmission Line LF Back Loading Acoustic Transmission Line HF Waveguide
Frequency Response (±3dB)	85 Hz – 16.8kHz (Processed)
Horizontal/Vertical Coverage Angle	100° x 10° (-6dB)
Maximum Peak SPL @ 1m	132 dB

TRANSDUCERS

LF	Two 8"(200mm), 2" (38mm) voice coil, 8Ω each, paralleled
HF	One 1.4" driver, 2.5" (64mm) edgewound voice coil, titanium diaphragm, 8Ω

ELECTRICAL

Input Impedance	20 kΩ balanced, 10 kΩ unbalanced
Input Sensitivity	+4 dBu / 1.25 V
Signal Processing	CORE processing, 96kHz / 40bit floating point SHARC DSP, 24 bit AD/DA converters
Direct access Controls	4 Presets (Standard/Long Throw/Down Fill-Single Box, User), Network Termination, GND Link.

Remote Controls	PRONET control software
Network protocol	CANBUS
Amplifier Type	Class D amplifier with SMPS
Output Power	900W + 300W
Mains Voltage Range (Vac)	230 V~ ±10% or 115 V~ ±10% 50/60 Hz
Consumption*	575 W (nominal) 1200 W (max)
IN / OUT Connectors	Neutrik XLR-M / XLR-F
IN / OUT Network Connectors	ETHERCON® (NE8FAV)
Mains Connector	PowerCon® (NAC3MPA)
Mains Link Connector	PowerCon® (NAC3MPB)
Cooling	Variable speed DC fan

ENCLOSURE & CONSTRUCTION

Dimensions (W x H x D)	600mm (23.6") x 265.5mm (10.5") x 516mm (20.3")
Enclosure Material	Polypropylene
Rigging system	
Front Suspension	Aluminium Fast Link structure
Back Suspension	High Strength Steel with ¼ Fast Pin
Net Weight	25 Kg (55.1 lbs)

Nominal consumption is measured with pink noise with a crest factor of 12 dB, this can be considered a standard music program.

AXIOM

MECHANICAL DRAWING

26.55 cm
10.45"

23.4 cm
9.21"

18.5 cm
7.28"

51.6 cm
20.3"

60 cm
23.6"
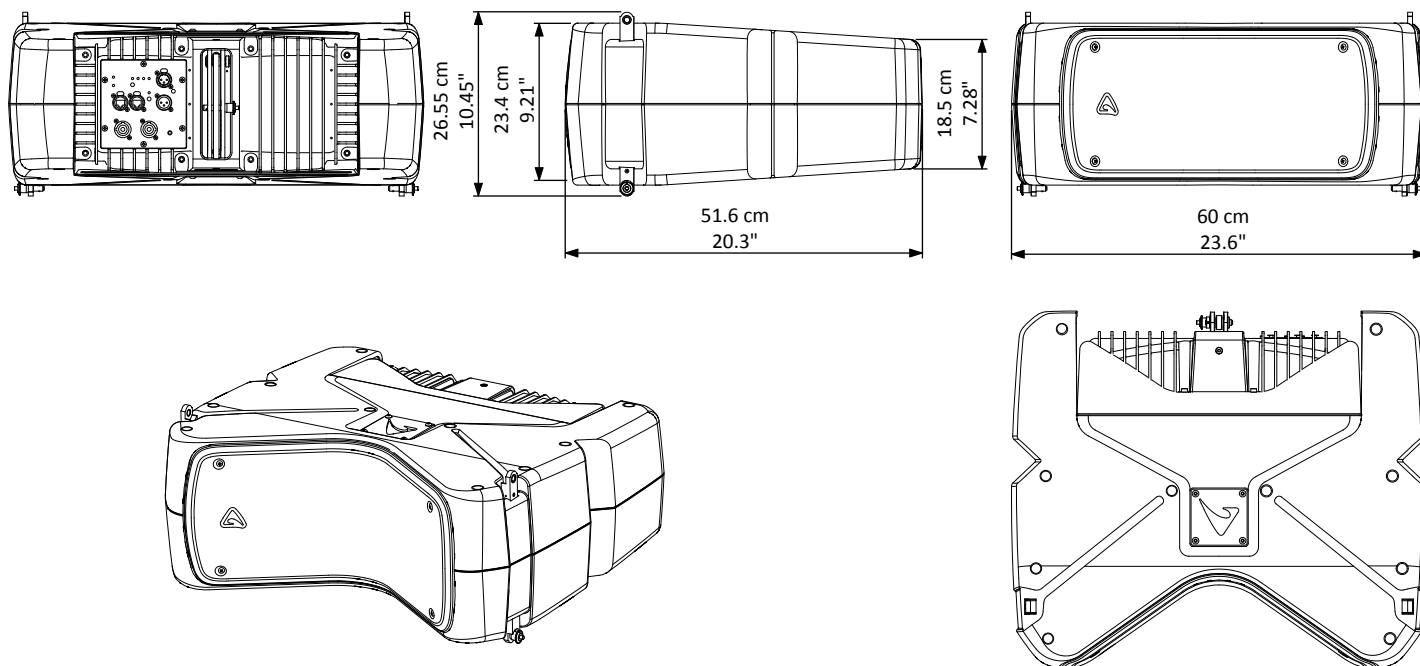
OPTIONAL ACCESSORIES

AXCASE08	Carrying Case for 4 box unit
NAC3FCA	Neutrik Powercon® BLUE PLUG
NAC3FCB	Neutrik Powercon® WHITE PLUG
NE8MCB	Neutrik Ethercon PLUG
NC3MXXBAG	Neutrik XLR-M
NC3FXXBAG	Neutrik XLR-F
SW1800A	2X18" Active Subwoofer
USB2CAN	PRONET network converter
USB2CAND	Dual output PRONET network converter
CAT5SLU01/05/10	LAN5S - Cat5e - RJ45 plugs and NE8MC1 connectors. 1/5/10 m Length
AR100LUxx	Hybrid cable 1x Cat6e - 1x Audio with NEUTRIK connectors 0.7/1.5/2.5/5/10/15/20 m Length
AR200LUxx	Hybrid cable 1x Cat6e - 2x Audio with NEUTRIK connectors 20/30/40/60/80 m Length
AVCAT5PROxx	Cat5e on cable drum, RJ45 plugs and NEUTRIK connectors 30/50/75 m Length
KPTAX800	Flying bar for 4 AX800A array loudspeakers
KPTAX800L	Flying bar for 12 AX800A array loudspeakers
AXFEETKIT	Kit of 6pcs BOARDACF01 M10 foot for stacked installation
KPAX8	Pole Adaptor for 2 AX800
DHSS10M20	Adjustable Sub-Speaker ø35mm spacer with M20 screw
RAINCOV800	Rain cover for input sockets

see http://www.axiomproaudio.com/ for detailed description and other available accessories.

SPARE PARTS

PLG716	Straight Shackle 16 mm for Fly bar
94SPI816	16mm Locking Pin (AX800A front)
94SPI826	26mm Locking Pin (AX800A rear)
94SPI840	40mm Locking Pin (AX800A with KPTAX800L)
91AMDAX800	Power amplifier module with mechanical assembly
91DSPKT10	Input, Control and DSP PCBA
98AXM8WZ8	8'' woofer - 2" VC
98DRI2000	1.4'' - 2.4" VC compression driver
98MBN2000	titanium diaphragm for 98DRI2000 HF driver

contact the technical support on http://www.axiomproaudio.com/ for request or detailed spare part list.

AXIOM

I/O AND CONTROL OPERATIONS

MAINS IN - Powercon® NAC3FCA power input connector (blue). To switch the amplifier on, insert the Powercon® connector and turn it clockwise into the ON position. To switch the amplifier off, pull back the switch on the connector and turn it counter-clockwise into the POWER OFF position.

MAINS OUT - Powercon® NAC3FCB power output connector (grey). This is connected in parallel with the MAINS ~ / IN. The maximum load applicable depends on the mains voltage. With 230V~ we suggest to link a maximum of 5 AX800A loudspeakers, with 120V~ we suggest to link a maximum of 3 AX800A loudspeakers.

⚠ **WARNING! In the case of product failure or fuse replacement, disconnect the unit completely from the mains power. The power cable must only be connected to a socket corresponding to the specifications indicated on the amplifier unit. The power supply must be protected by a suitably rated thermo-magnetic breaker. Preferably use a suitable switch to power on the whole audio system leaving the Powercon® always connected to each speaker, this simple trick extend the life of the Powercon® connectors.**

INPUT - Audio signal input with locking XLR connector. It has a fully electronically balanced circuitry including AD conversion for the best S/N ratio and input headroom.

LINK - A direct connection from the input connector to link other speakers with same audio signal.

ON - This LED indicates power on status.

SIGN/LIMIT - This LED lights in green to indicate the presence of the signal and lights in red when an internal limiter reduces the input level.

GND LIFT - This switch lift the ground of the balanced audio inputs from the earth-ground of the amplifier module.

PRESET BUTTON - This button has two function:
1) Pressing it while powering on the unit:

ID ASSIGN   the internal DSP assigns a new ID to the unit for the PRONET remote control operation. Each loudspeaker must have a unique ID to be visible in the PRONET network. When you assign a new ID, all the other loudspeakers with the ID already assigned must be ON and connected to the network.

2) Pressing it with the unit ON you can select the DSP PRESET. The selected PRESET is indicated by the corresponding LED:

STANDARD   This PRESET is suitable for vertical flown arrays that may range from 4 to 8 boxes or for the centre region of a bigger flown array. It can be used also for stacked arrays.

LONG THROW   This PRESET can be used in arrays bigger than 6 or 8 boxes and loaded in the top 1 or 2 boxes in order to obtain a more even distribution of the sound pressure, especially if they point very far away or to the upper deck of a large theatre.

DOWN FILL / SINGLE BOX   This PRESET, which features a much smoother high frequency response, can be loaded in the bottom boxes (usually 1 or 2 boxes) of a large flown array, in order to reach conveniently the audience close to the stage. This preset could be very useful also when the box is used just on its own as a Front Fill element in the front of very large stages.

USER   This LED lights when the USER PRESET is loaded. This preset corresponds to USER MEMORY no. 1 of the DSP and, as a factory setting, it's the same to STANDARD. If you want to modify it, you have to connect the unit to a PC, edit the parameters with PRONET software and save the PRESET into USER MEMORY no. 1. *Note: see also the PRONET example further on this manual.*

NETWORK IN/OUT - These are a standard RJ45 CAT5 connectors (with optional NEUTRIK NE8MC RJ45 cable connector carrier), used for PRONET network transmission of remote control data over long distance or multiple unit applications.

⚠ **TERMINATE -** In a PRONET network the last loudspeaker device must be terminated (with an inner load resistance) especially in a long run cabling: press this switch if you want to terminate the network on this unit.
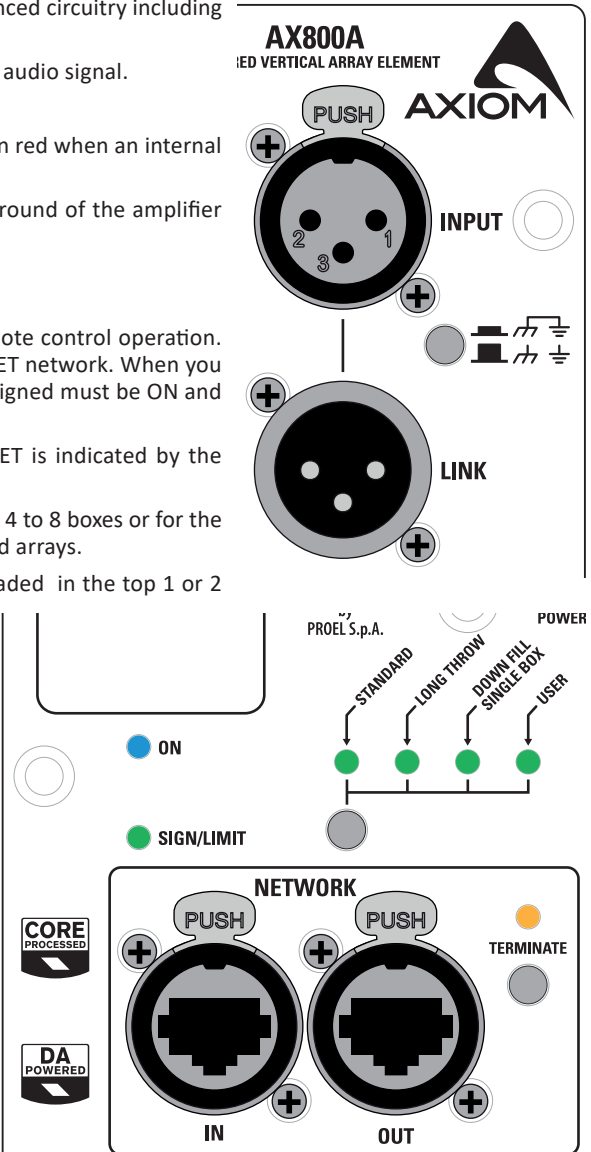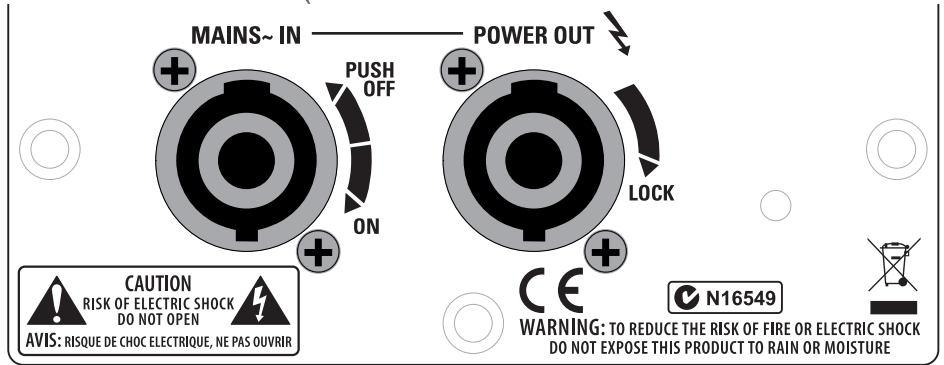
POWER AMPLIFIERS

Powering the loudspeaker drivers is a well-proven DA series Class D amplifier module used in many of the Axiom powered loudspeaker products, with audio quality that is comparable to some of the best analogue Class A-B designs, but with the benefit of lower weight and better than 90% efficiency. The output power is optimised specifically to the drive units, sharing 900 watts between both woofers and delivering 200 watts to the high frequency band. The DA series amplifier delivers superior definition at all frequencies, and very high dynamic range with low distortion even at maximum level, so your sound remains clean and dynamic even when loud.

SIGNAL PROCESSING

The system processing is based on the CORE DSP platform, which has been designed by the PROEL R&D Laboratories using one of the most advanced SHARC DSP for audio application. It features 40bit, 96kHz floating point resolution and high quality 24bit AD/DA converters, for a perfect signal integrity, a dynamic range in excess of 110dB and a superior sonic performance. Thanks to its massive processing power, the CORE platform is capable of providing the most sophisticated algorithms for speaker processing, together with remote control and networking capability.

The PRONET control software, working on a solid and reliable CANBUS based network protocol, provides an intuitive interface for the remote control of the whole system, with the possibility of eqing, delaying, increasing the protections and monitoring the status of the amplifier.

PRONET

PRONET software has been developed in collaboration with sound engineers and sound designers, in order to offer an "easy-to-use" tool to setup and manage your audio system. With PRONET you can visualize signal levels, monitor internal status and edit all the parameters of each connected device.

Download the PRONET app from the AXIOM website at http://www.axiomproaudio.com/ clicking on downloads section of the product.

The AXIOM active loudspeaker devices can be connected in a network and controlled by the PRONET software. For the network connection the PROEL USB2CAN or USB2CAND converter optional accessory is needed. The first time you connect a device with the USB2CAN converter, Windows O.S. will ask you to install the driver files, which you can find in the Driver folder within the Pronet application folder (by default is C:\Program Files\Proel\Pronet\Driver, or if you changed it <your path>\Driver). Please refer also to "Installation" and "Drivers" paragraphs in the Pronet documentation. The PRONET NETWORK is based on a robust, reliable and fast communication protocol called CANBUS. The devices in a PRONET NETWORK are connected together with a "linear bus topology". The USB2CAN converter must be connected to the network input of the first device, the network output of the first device is connected to the input of the second and so on. For the network connections simple RJ45 cat.5 or cat.6 ethernet cables can be used (please don't confuse a ethernet network with a PRONET network these are completely different and must be fully separated also both use the same kind of cable).

The beginning and the end of a PRONET

EXAMPLE OF PRONET NETWORK WITH AX800A AND SW1800A

NETWORK must be terminated. One side is terminated by the USB2CAN converter, the other side must be terminated pressing the TERMINATE switch on the last device. All devices between these two points must have the TERMINATE switch lifted.

Assign the ID number

To work properly in a PRONET network each connected device must have a unique identifier number, called ID. By default the USB2CAN PC controller has ID=0 and there can be only one PC controller. Every other device connected must have its own unique ID equal or greater than 1: in the network cannot exist two devices with the same ID.

An ID number is assigned automatically to each devices when they are turned on for the first time connected to a network.
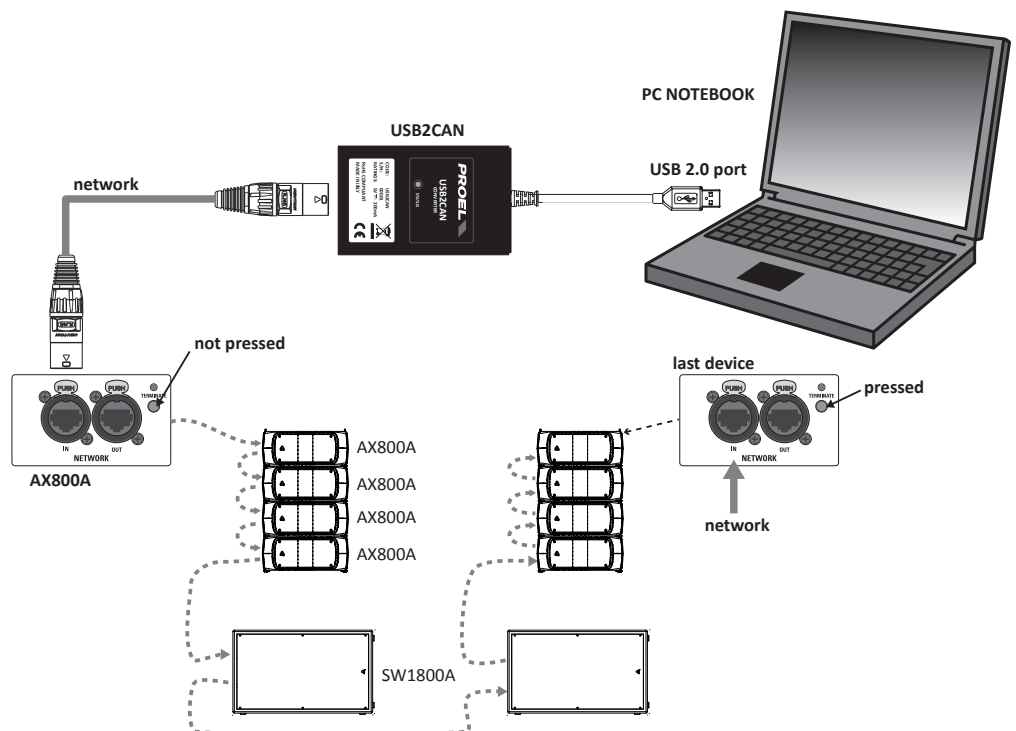
In order to correctly assign a new available ID to each device for working properly in a Pronet network, follow these instructions:

1. Switch off all the devices.
2. Connect them correctly to the network cables.
3. "TERMINATE" the latest device in the network connection.
4. Switch on the first device keep pressed "PRESET" button on the control panel.
5. Leaving the previous device switched on, repeat the previous operation on the next device, until the latest device is turned on.

The "Assign ID" procedure for a device makes the internal network controller to perform two operations: reset the current ID; search the first free ID in the network, starting from ID=1. If no other devices are connected (and powered on), the controller assume ID=1, that is the first free ID, otherwise it searches the next one left free.

These operations ensure that every device has it's own unique ID, if you need to add a new device to the network you simply repeat the operation

of step 4. Every device maintains its ID also when it is turned-off, because the identifier is stored in the internal memory and it is cleared only by another "Assign ID" step, as explained above. This means that if your network is made always of the same devices the assigning ID procedure must be executed only the first time the system is turned on.

For more detailed instruction about PRONET see the PRONET USER'S MANUAL included with the software.

Useful tools to set up properly a vertical array system
This is a list of tools that can be very useful to set properly a vertical array system.

CABLE TESTER
It is a good practice to check all cables before each installation, because even one faulty cable can compromise heavily the system performance.

INCLINOMETER WITH LEVER
This tool can be used to verify the vertical array angle. It can be used at the top or at the bottom of the array In this case you have to sum all splay angles, so the maximum precision is needed for aiming the vertical array, particularly for long throw applications.

LASER DISTANCE METER
This instrument can be useful to measure the height of the vertical array and to know the distance between FOH-Subs and FOH-Array for setting the delay time.

Smaart

SMAART or similar acoustic measurement system
These are useful to measure delays, phase and response of the system.

TOP BOX
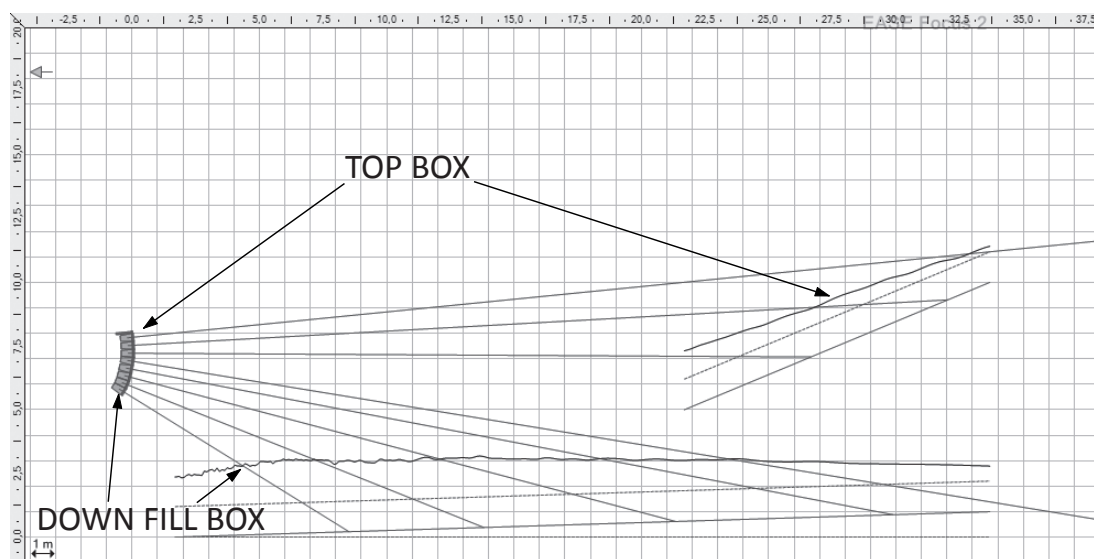
DOWN FILL BOX

EXAMPLE OF INSTALLATION IN A THEATRE WITH BALCONY
Here you can see an example of the use of different PRESETS in an AX800A flown array installed in a big theatre with balcony. The TOP BOXES of the array are aiming at the balcony while the DOWN FILL box is aiming at the audience close to the stage.

TOP BOXES: the power level at the end of the balcony is lower, as well as the high frequency level.

DOWN FILL BOXES: the power level in the proximity of the stage is higher, as well as the high frequency level.

PRESET USING EXAMPLE
In order to optimize the array performances for this specific application, the PRESETS should be used in the following way.
Load the STANDARD preset in the central boxes.
Load the LONG THROW preset in the TOP 1 or 2 boxes, in order to compensate the loss of power level and high frequencies of the program sent the upper deck of the theatre.
Load the DOWN FILL / SINGLE BOX preset in the BOTTOM box in order to smooth the high frequency content of the program sent to the audience close to the stage.

AX800A - PRESET RESPONSE
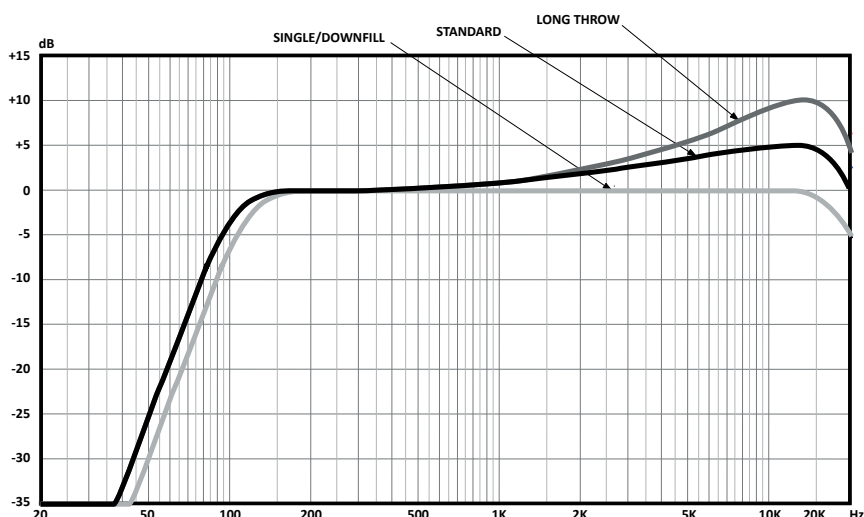
PREDICTION: EASE Focus 3

To aim correctly a complete system we suggests to use always the Aiming Software - EASE Focus 3:

The EASE Focus 3 Aiming Software is a 3D Acoustic Modelling Software that serves for the configuration and modelling of Line Arrays and conventional speakers close to reality. It only considers the direct field, created by the complex addition of the sound contributions of the individual loudspeakers or array components.

The design of EASE Focus is targeted at the end user. It allows the easy and quick prediction of the array performance in a given venue. The scientific base of EASE Focus stems from EASE, the professional electro- and room acoustic simulation software developed by AFMG Technologies GmbH. It is based on the EASE GLL loudspeaker data file required for its use: **AXIOM_AX800A_ v1_0**, please note that the version must be 1.0 or more. The GLL file contains the data that defines the Line Array with regard to its possible configurations as well as to its geometrical and acoustical properties.

Download the EASE Focus 3 app from the AXIOM website at http://www.axiomproaudio.com/ clicking on downloads section of the product.

Use the menu option **Edit / Import System Definition File** to import the file **AXIOM_AX800A_v1_0** from the installation Data folder, the detailed instructions to use the program are located in the menu option **Help / User's Guide**.
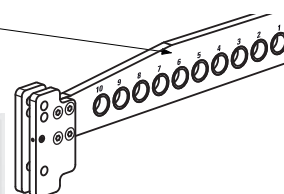
Note: Some windows system can require the .NET Framework 4 that can be download from microsoft website at http://www. microsoft.com/en-us/download/default.aspx.

A Simulation Software by AFMG®
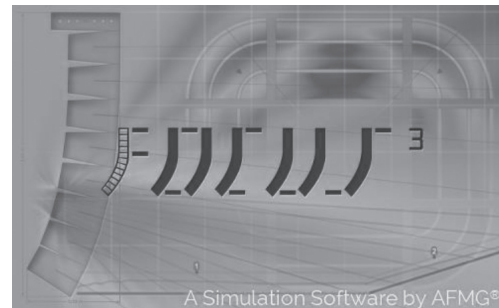
KPTAX800 FLOWN PINPOINT
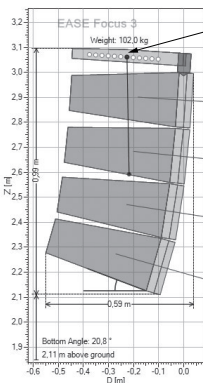
SINGLE PINPOINT FOR STRAIGHT SHACKLE

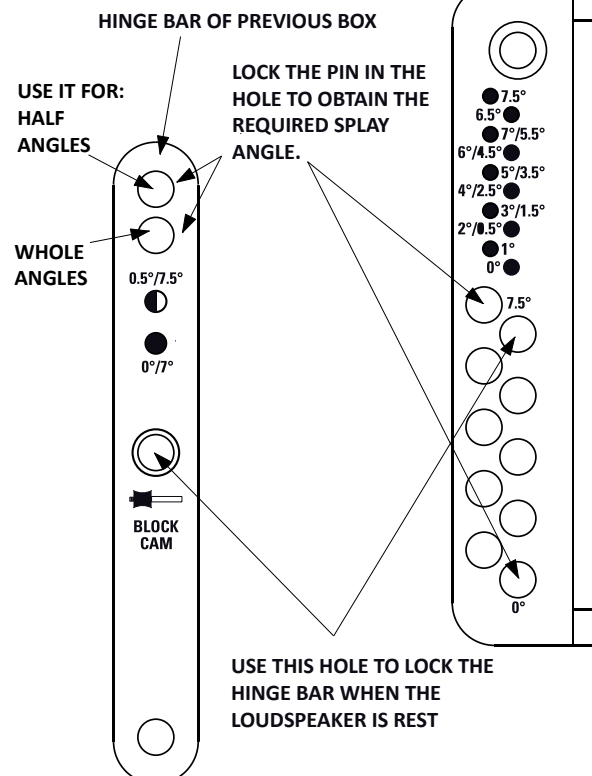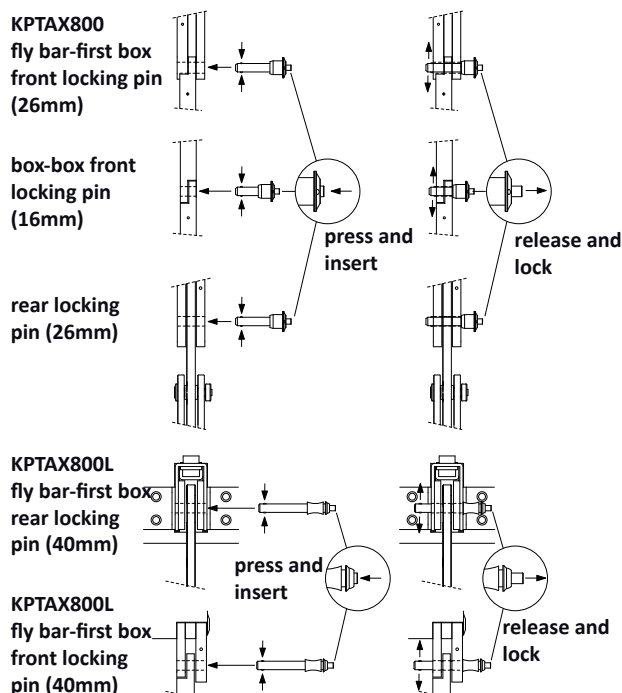⚠️ **WARNING! CAREFULLY READ THE FOLLOWING INSTRUCTIONS AND CONDITION OF USE:**

• This loudspeaker is designed exclusively for Professional audio applications. **The product must be installed by qualified personal only**.

• Proel strongly recommends that this loudspeaker cabinet be suspended taking into consideration all current National, Federal, State and Local regulations. Please contact the manufacturer for further information.

• Proel do not accept any liability for damage caused to third parties due to improper installation, lack of maintenance, tampering or improper use of this product, including disregard of acceptable and applicable safety standards.

• During assembly pay attention to the possible risk of crushing. Wear suitable protective clothing. Observe all instructions given on the rigging components and the loudspeaker cabinets. When chain hoists are in operation ensure that there is nobody directly underneath or in the vicinity of the load. Do not under any circumstances climb on the array.

Pin locking and splay angles set up

The figure below shows how to insert correctly the locking pin and how to set up the splay angle between loudspeakers.

LOCKING PINS INSERTION

KPTAX800 fly bar-first box front locking pin (26mm)

box-box front locking pin (16mm)

press and insert

release and lock

rear locking pin (26mm)

KPTAX800L fly bar-first box rear locking pin (40mm)

press and insert

KPTAX800L fly bar-first box front locking pin (40mm)

release and lock

LOUDSPEAKER SPLAY ANGLES SET UP

HINGE BAR OF PREVIOUS BOX

USE IT FOR: HALF ANGLES

LOCK THE PIN IN THE HOLE TO OBTAIN THE REQUIRED SPLAY ANGLE.

WHOLE ANGLES

0.5°/7.5°

0°/7°

BLOCK CAM

7.5°
6.5°
7°/5.5°
6°/4.5°
5°/3.5°
4°/2.5°
3°/1.5°
2°/0.5°
1°
0°

7.5°

0°

USE THIS HOLE TO LOCK THE HINGE BAR WHEN THE LOUDSPEAKER IS REST

AIMING and SUSPENDING INSTRUCTIONS
Fly Bar and accessories

The AX800A systems are built to allow the suspension of array with variable shape and dimensions. Thanks to a suspension mechanism designed to be functional, flexible and safe, each system must be suspended or stacked using the **KPTAX800** or **KPTAX800L** fly bar. The loudspeakers are linked together in a column using a series of couplers integrated in the frame of each enclosure. Each system is set up properly both acoustically and mechanically only using the aiming software.

Coupling system in the front does not require any adjustment: using two locking pins, each loudspeaker box is fixed to the previous. The slotted bar in the back is inserted in a U-shaped frame which features a series of numbered holes. Sliding the slotted bar in the U-shaped frame of the next loudspeaker and inserting a locking pin in one of the numbered holes, it is possible to adjust the relative splay angle between two adjacent loudspeakers in the array column.

⚠ **KPTAX800 fly bar maximum capacity is 200 Kg (441 lbs) with the 0° angle. It can support, with a safety factor of 10:1, up to:**
- **4 AX800A**
- **KPTAX800 can NOT be used for stacked array.**

⚠ **KPTAX800L fly bar maximum capacity is 680 Kg (1500 lbs) with the 0° angle. It can support, with a safety factor of 10:1, up to:**
- **12 AX800A**
- **KPTAX800L can be used for stacked array for a maximum of 4 AX800A units.**

NOTE: The figures illustrate the KPTAX800 and KPTAX800L usages, these are similar with the respective load capacity limitations.

Follow the sequence in the figure for fixing the fly bar at the first box. Usually this is the first step before lifting up the system. Be careful to insert properly all the locking pins (1)(2) and (3)(4) then the shackle (5) in the right holes as specified by the aiming software.

When lifting the system always proceed gradually step by step, paying attention to secure the fly bar to the box (and the box to the other boxes) before pulling up the system: this makes easier to insert properly the locking pins. Also when the system is released down, unlock gradually the pins. During the lifting be very careful to not let the cables enter the space between one enclosure and the other, as their compression could cut them.
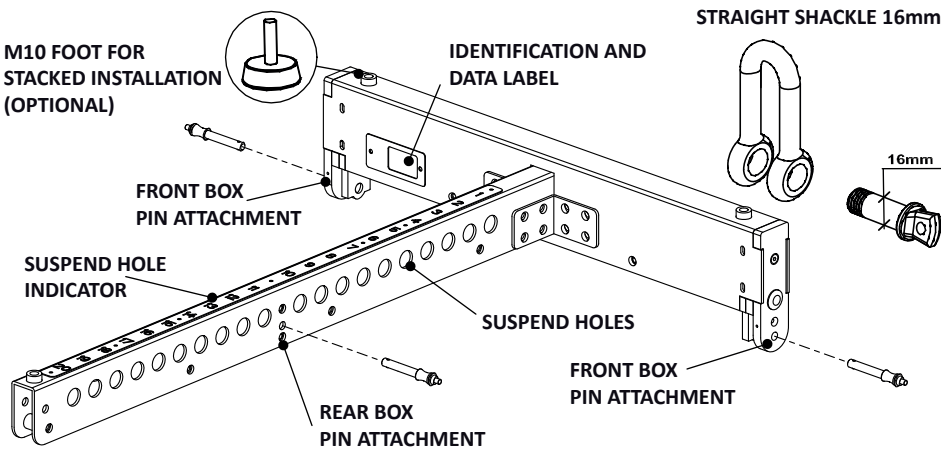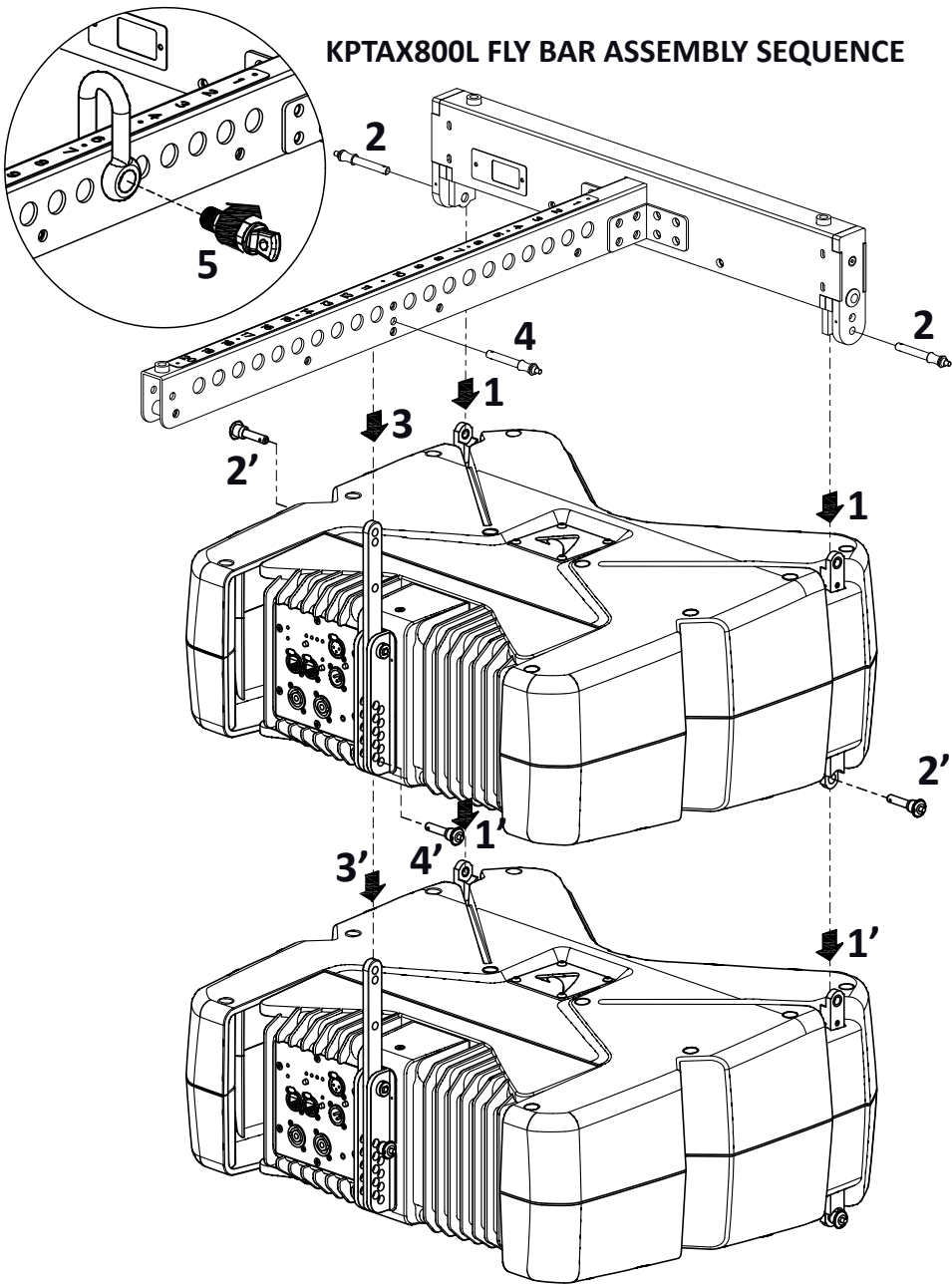
KPTAX800 FLY BAR AND ACCESSORIES

STRAIGHT SHACKLE 16mm

IDENTIFICATION AND DATA LABEL

16mm

FRONT BOX PIN ATTACHMENT

SUSPEND HOLE INDICATOR

SUSPEND HOLES

REAR BOX PIN ATTACHMENT

FRONT BOX PIN ATTACHMENT
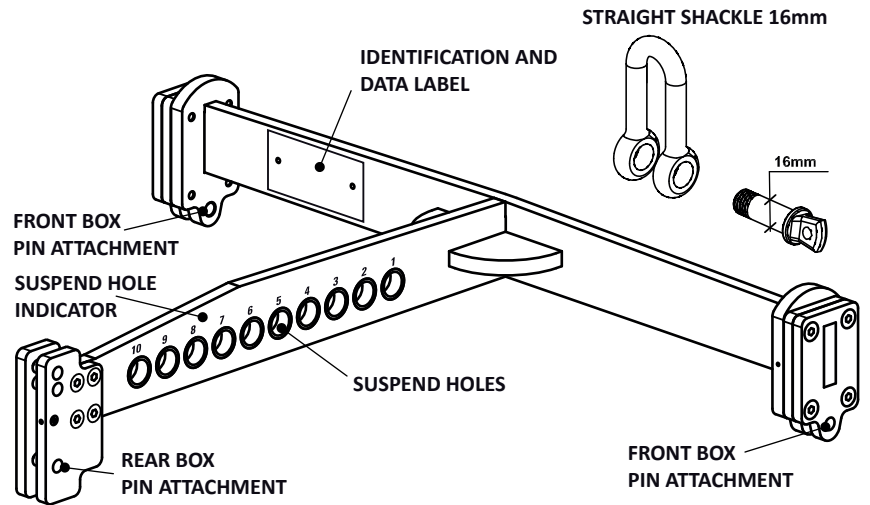
KPTAX800 FLY BAR ASSEMBLY SEQUENCE
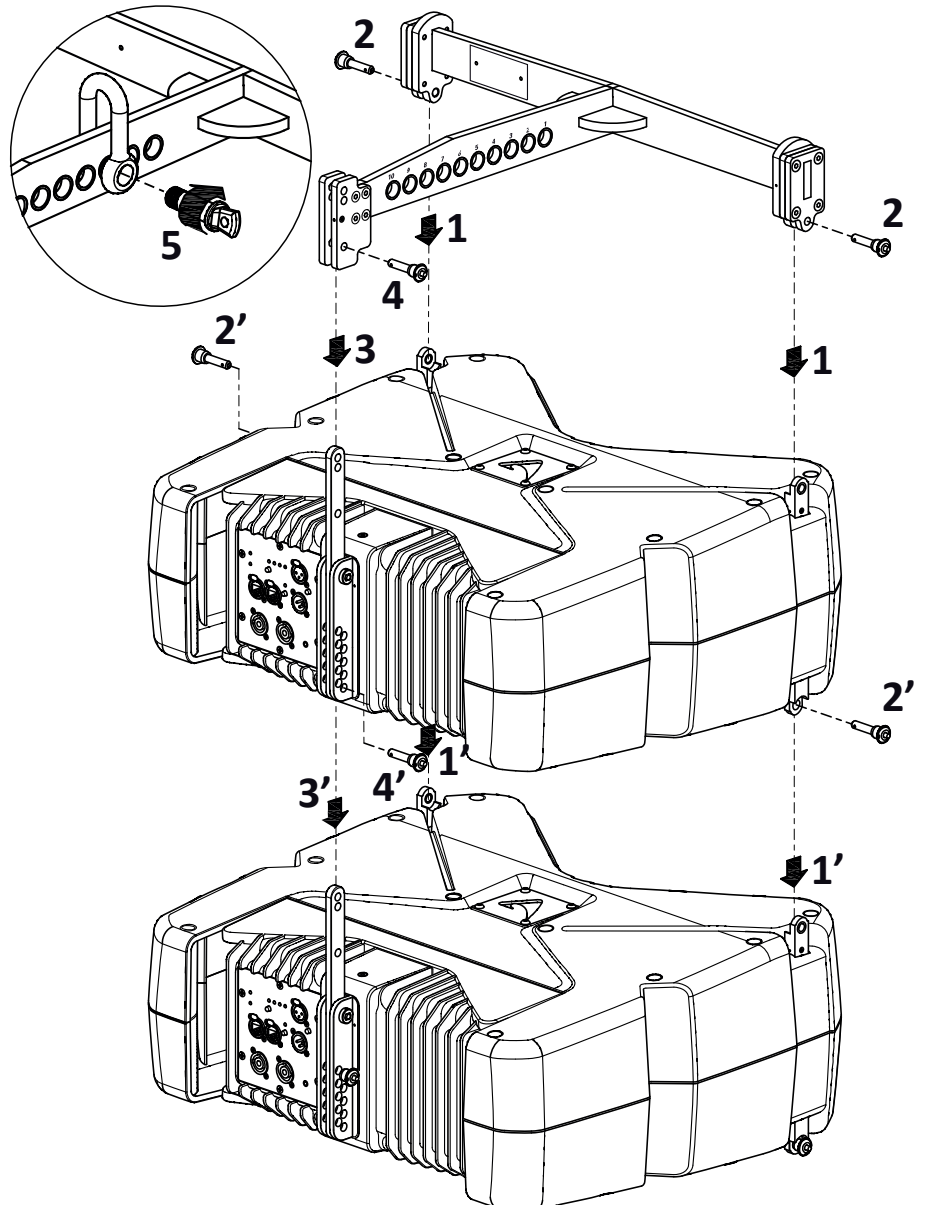
KPTAX800L FLY BAR AND ACCESSORIES

M10 FOOT FOR STACKED INSTALLATION (OPTIONAL)

IDENTIFICATION AND DATA LABEL

STRAIGHT SHACKLE 16mm

16mm

FRONT BOX PIN ATTACHMENT

SUSPEND HOLE INDICATOR

SUSPEND HOLES

REAR BOX PIN ATTACHMENT

FRONT BOX PIN ATTACHMENT

KPTAX800L FLY BAR ASSEMBLY SEQUENCE

2

5

2

4

1

3

1

2'

2'

1

3'

4'

1

1'

AXIOM

Fly bar suspension and angle setup (centre of gravity)

The figure at the top of this page shows where the normal centre of gravity is with one box or several boxes arranged in a line. Usually the boxes are arranged to make an arc for the best coverage of the audience, so the center of gravity moves backward. The aiming software suggests the ideal suspension pinpoint taking into account this behaviour: fix the straight shackle in this position.

Note that the ideal aiming angle often doesn't correspond to the pinpoint: there is often a little difference between ideal aiming and real aiming and its value is the Delta angle: positive delta angle can be adjusted a little using two ropes, negative delta angle are self adjusted a little because the cables weighs on the back of the array. With some experience it's possible to consider preventively these required little adjustments.

During the flown set up you can connect the elements of the array to their cables. We suggest to discharge the weight of the cables from the flying pinpoint by tying them with a textile fibre rope, instead of letting them hang freely: in this way the position of the array will be much more similar to the simulation produced by the software.

KPTAX800 FLY BAR FOR FLOWN ARRAY

CENTRE OF GRAVITY
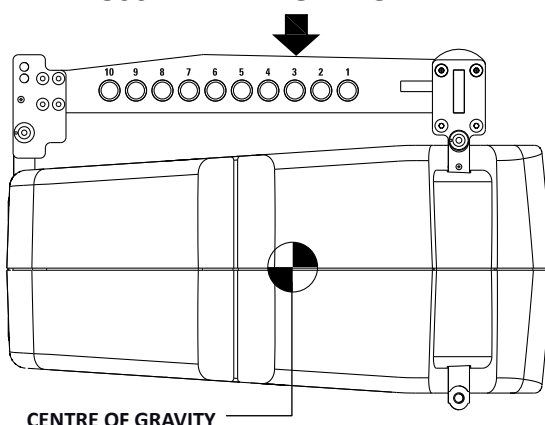
KPTAX800L FLY BAR FOR FLOWN ARRAY

CENTRE OF GRAVITY
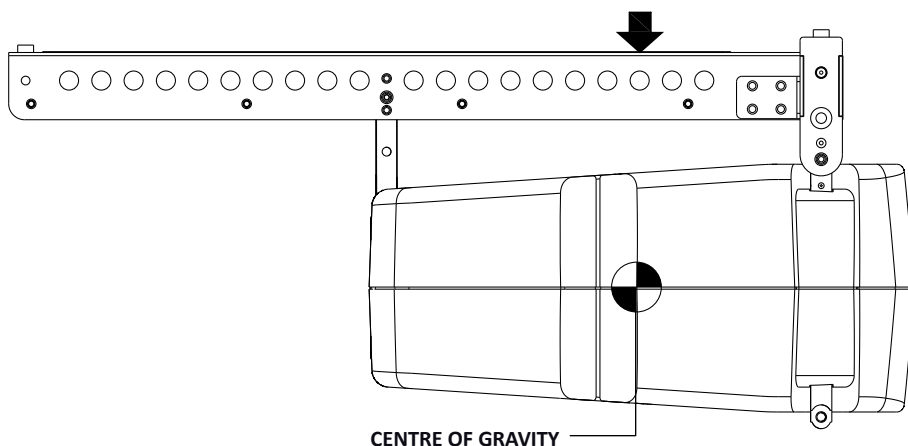
Wind loads

When planning an open-air event it is essential to obtain current weather and wind information. When loudspeaker arrays are flown in an open-air environment, possible wind effects must be taken into account. Wind load produces additional dynamic forces acting on the rigging components and the suspension, which may lead to a dangerous situation. If according to the forecast wind forces higher than 5 bft (29-38 Km/h) are possible, the following actions have to be taken:

- The actual on-site wind speed has to be monitored permanently. Be aware that wind speed typically increases with height above ground.
- Suspension and securing points of the array should be designed to support double the static load in order to withstand any additional dynamic forces.

⚠️ **WARNING!**
Flying loudspeakers overhead at wind forces higher than 6 bft (39-49 Km/h) is not recommended. If the wind force exceeds 7 bft (50-61 Km/h) there is a risk of mechanical damage to the components which may lead to a dangerous situation for persons in the vicinity of the flown array.
- Stop the event and make sure that no person remains in the vicinity of the array.
**- Lower and secure the array.**

Stacked System with KPTAX800L.

⚠️ **WARNING!**
• The ground where the KPTAX800L Fly bar serving as ground support is placed needs to be absolutely stable and compact.
• Adjust the feet so to lie the bar perfectly horizontal.
• Always secure ground stacked setups against movement and possible tipping over.
• A maximum of 4 x AX800A cabinets with the KPTAX800L Fly bar serving as ground support are allowed to be set up as ground stack.

In the stack configuration you have to use the three optional BOARDACF01 feet and the fly bar must be mounted upside down on the ground. Coupling system in the front do not require any adjustment: using two locking pins each loudspeaker box is fixed to the previous. The slotted bar in the back is inserted in a U-shaped frame which features a series of numbered holes. Sliding the slotted bar in the U-shaped frame of the next loudspeaker and inserting a locking pin in one of the numbered holes, it is possible to adjust the relative splay angle between two adjacent loudspeakers in the array column.
The optimal splay angles can be simulated using the EASE Focus 3 software.

KPTAX800L STACKED ARRAY

max splay angle 7.5°

max splay angle 7.5°

max splay angle 7.5°
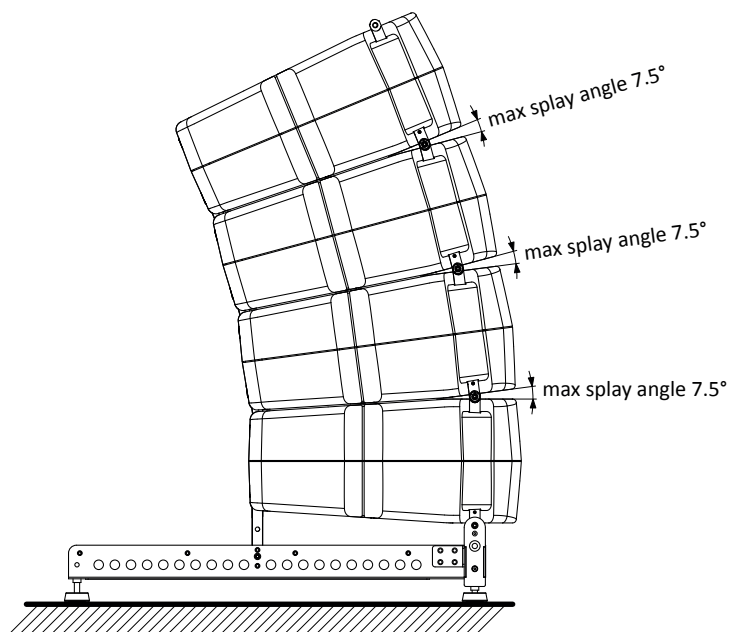
Stacked System with KPAX8 pole adapter

WARNING!
- A maximum of 2 x AX800A can be installed on a pole using the KPAX8 pole adapter.
- The KPAX8 can be installed on a SW1800A sub-woofer (preferably in horizontal position) using the DHSS10M20 adjustable sub-Speaker ø 35mm spacer.
- The basement where the system is placed needs to be an horizontal plane.
- The splay angle of the first box attached to the KPAX8 must be less of 6°.
- The figure below shows the system configuration set up. Please note that the angles set up doesn't correspond to the silkscreen written on the back of the box, the figure below shows the real correspondence for a precise angles set up:

KPAX8 SPLAY ANGLES SET UP

USE IT FOR:
HALF ANGLES

WHOLE ANGLES

1.5° - 5.5°
1° - 6°

HORIZONTAL NULL ANGLE

0°

BLOCK CAM

FULCRUM HOLE

HINGE BAR OF KPAX8

LOCK THE PIN IN THE HOLE TO OBTAIN THE REQUIRED SPLAY ANGLE.

2 BOX MAXIMUM

for the first box set an angle less than 6°

1.5°
1°/2.5°
2°/3.5°
3°/4.5°
4°/5.5°
5°
6°
0°

FIRST BOX

KPAX8

DHSS10M20

950 mm min.
1160 mm max.

SW1800A