



*Rigging Manual*

**event**  
line array

*EVENT-208A / EVENT-210A / EVENT-M210A / EVENT-218A*



**El colgado del equipo sólo debe realizarse utilizando los herrajes de colgado recomendados y por personal cualificado. No cuelgue la caja de las asas.**

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

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### **Warning**

This manual offers all the necessary information for flying or stacking *Event Line Array series* systems of **DAS Audio**. This information is illustrated with drawings and required safety precautions.

To any operations related to flying a 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 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 **DAS Audio Group, S.L.** Specifications are subject to change without notice.

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 for 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 a system is flying, 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 prevent 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 **DAS Audio** are the user's responsibility. Use at your own risk.

## 4 UNITS MOUNTING ON A FLATBED DOLLY

Groups of three or four units are easy to transport by truck as we will see in this manual. We will also see the preparation with *EVENT-208A* y *EVENT-210A*. But, such an extensive explanation isn't required for *EVENT-218A*, as this model can be used only in stacked systems lacking a rigging system (stacking up to 3 units on a *PL-EV218S*).

Once the packaging is removed, you can see three security pins on both enclosure sides (see figure), near the handles.

Now, you remove two security pins (see the red arrows in the Fig.1), on each side.

Lift the enclosure by the handles and sit it gently over the platform (Fig. 2), aligning the holes for pins as shown in Fig.3.

Now, as shown in Fig.4, we insert the previously removed pins (the result is shown in Fig.5).



**Warning: For transport, introduce the pin in hole 0° at "Rear Link" (both sides).**

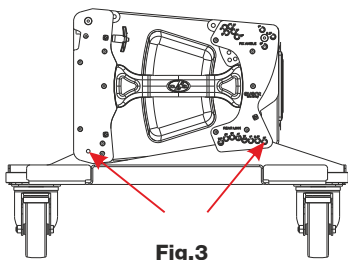


Fig.3

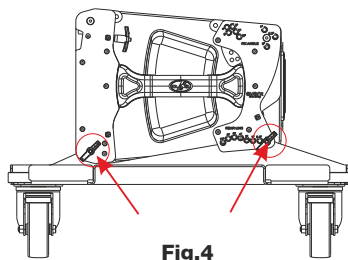


Fig.4

These pins allow to hold the first enclosure to the platform and, now, we will position the second enclosure

We will lift the hidden front and rear rods on both sides (see the grey arrows in Fig.6).

Note the front rod will "click" when blocked, but the back rod does not block.

Now, we move the pins left in the side and we insert it into the hole "Fix angle" corresponding to 0° (it is mandatory for safe transport), as shown in red at Fig.6 and Fig.7.

The result is shown in Fig.8. Now, to position a second enclosure, we will proceed similarly to the union between the first enclosure and the platform.

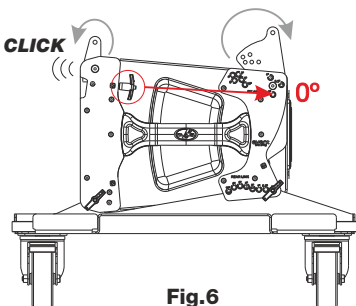


Fig.6

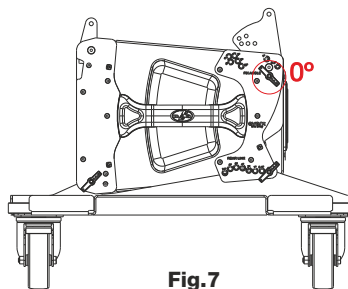


Fig.7

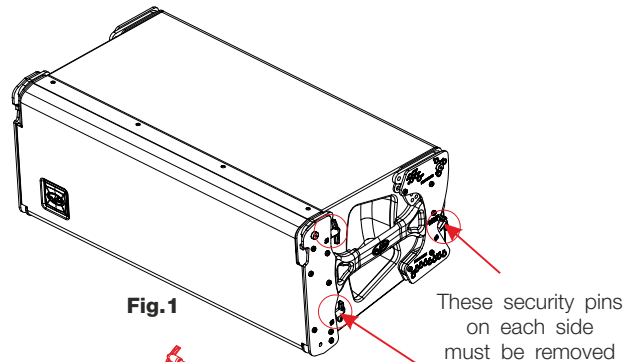


Fig.1

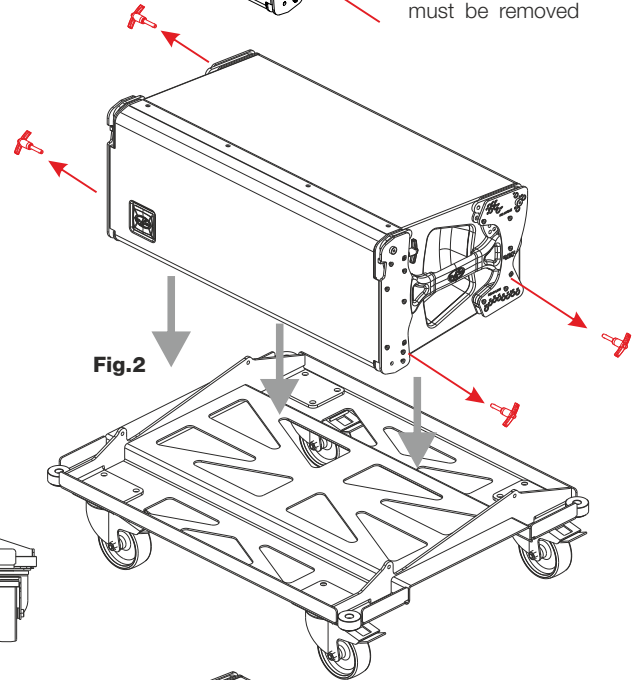


Fig.2

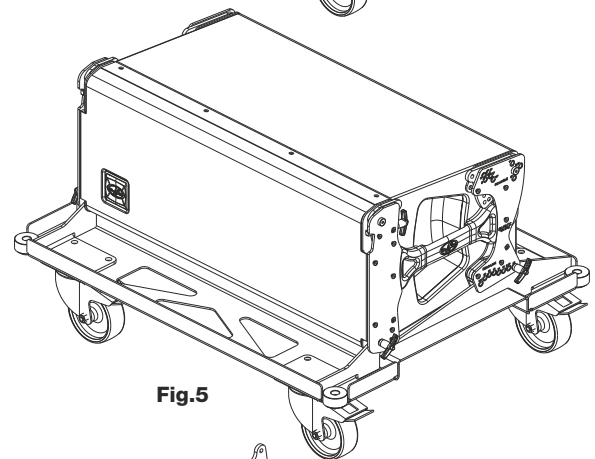


Fig.5

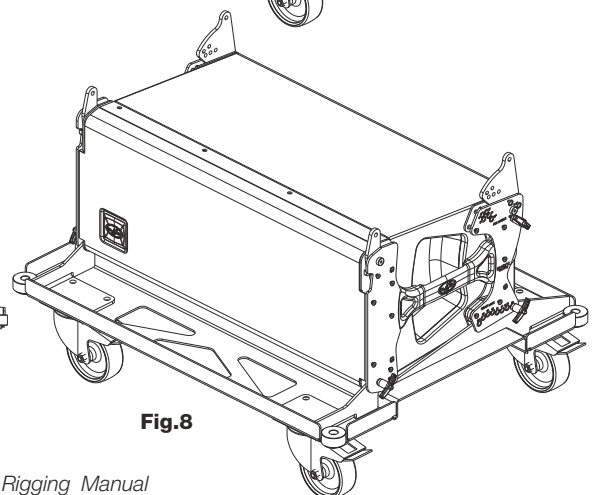


Fig.8



To position the second enclosure, we will remove two security pins on each side (see the red arrows in Fig.9).

Lift the enclosure by the handles and sit it over the first enclosure (see Fig.9), aligning the holes for pins as shown in Fig.10.

Now, as shown in Fig.11, we insert the previously removed pins (the result is shown in Fig.12).



**Warning: For transport, introduce the pin in hole 0° at "Rear Link" (both sides).**

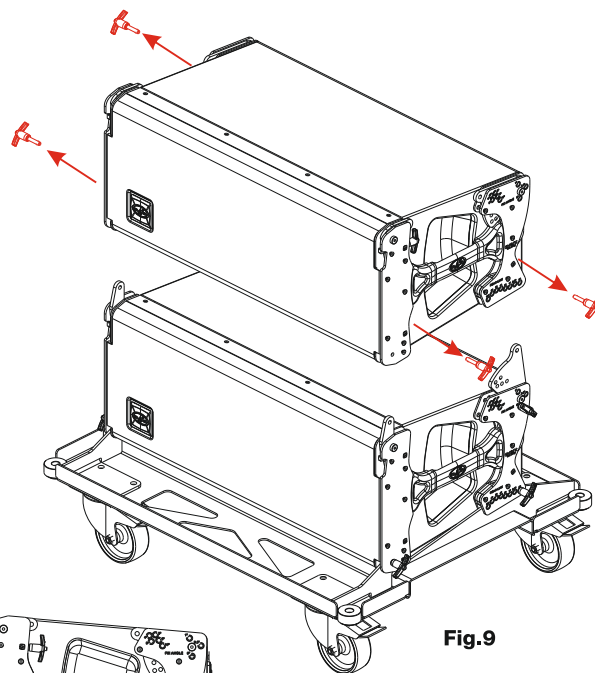


Fig.9

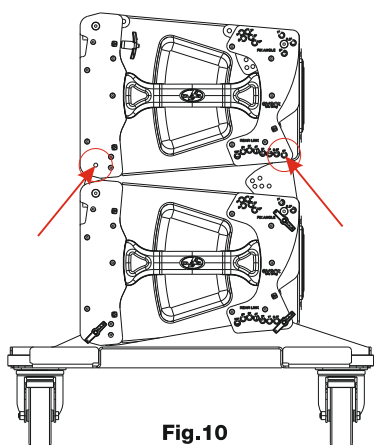


Fig.10

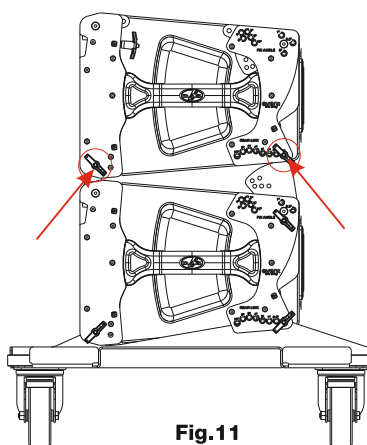


Fig.11

So, we have joined the second enclosure over the first with these pins and, now, we will position the third enclosure.

To do this, get up the front and rear rods on both sides, as already indicated in previous figures (see the grey arrows in Fig.13).

Note the front rod will "click" when blocked, but the back rod does not block.

Now, we move the pins left in the side and we insert it into the hole "Fix angle" corresponding to 0° (it mandatory for safe transport), as shown in red at Fig.13.

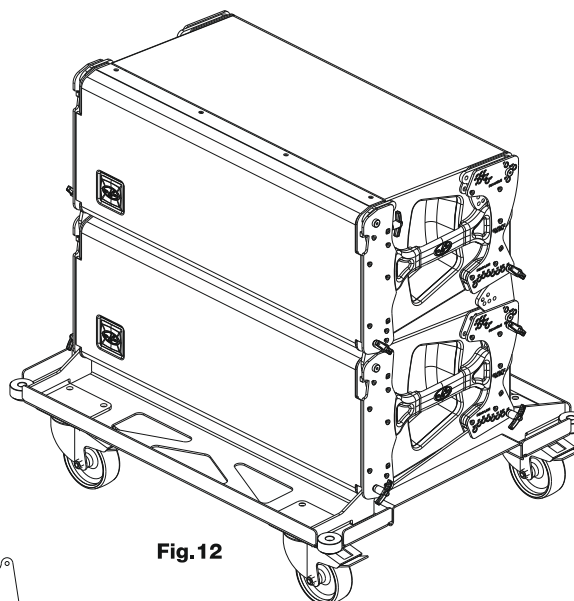


Fig.12

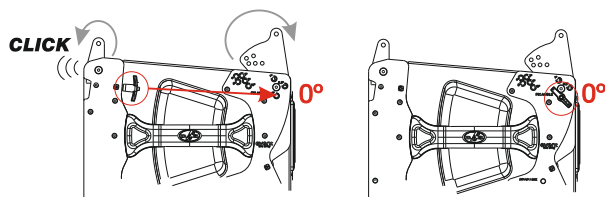
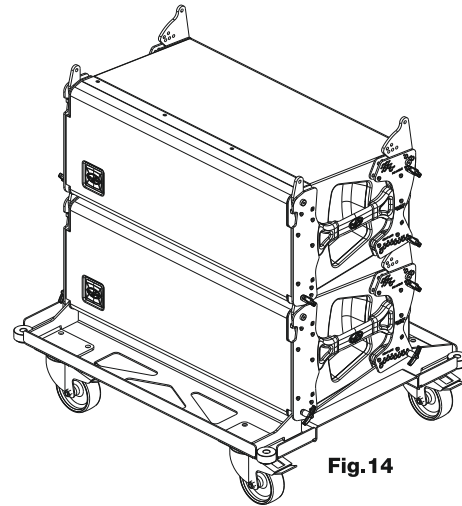


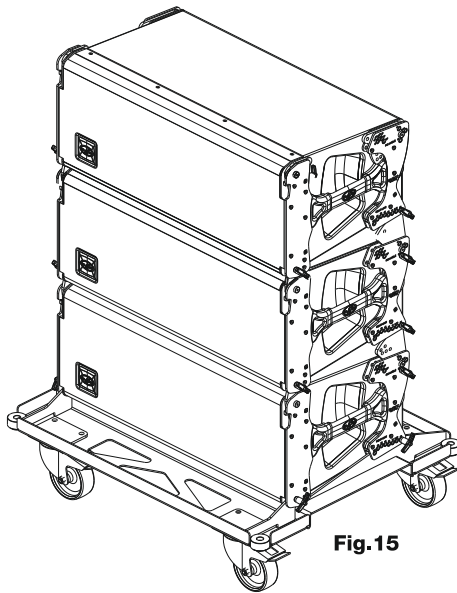
Fig.13

The result is shown in Fig.14. Now, to position a third enclosure, we will proceed similarly to the union between the second enclosure and the first (the result is shown in Fig.15).



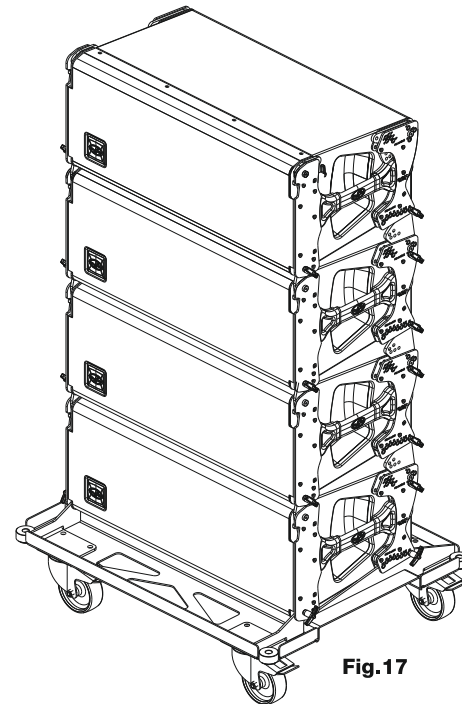
**Fig.14**

To position a fourth enclosure, we will lift the hidden front and rear rods on both sides (the result is shown in Fig.16).

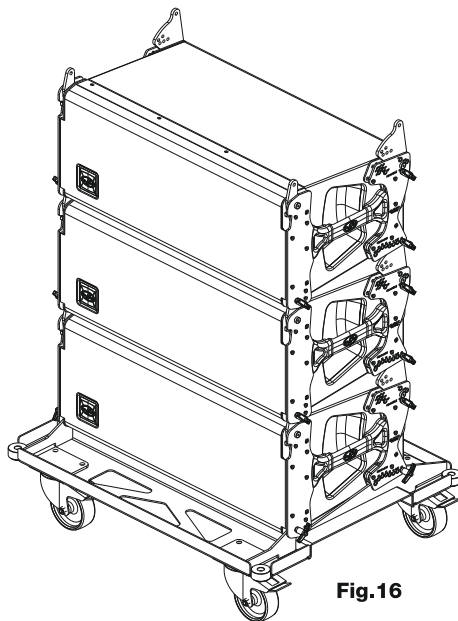


**Fig.15**

And finally, we will proceed similarly to the union between the third enclosure and the second (the result is shown in Fig.17).



**Fig.16**



**Fig.17**

For stability during transportation, we don't recommend to create groups of more units, although the platform can support the load.



**Remember: For safe transport, introduce the pins at both sides, in holes 0° at "Rear Link".**

## ARRAY MOUNTING OF GROUPS OF 4 UNITS ON A FLATBED DOLLY

Groups of three or four units are easy to transport by truck.

We will see in this section the assembly of a system array with groups of four units.

The first group with 4 units will be the superior group, that is to say, the group where we will install the correspondent AX (*AX-EV208* for *EVENT-208A* units and *AX-EV210* for *EVENT-210A* units).

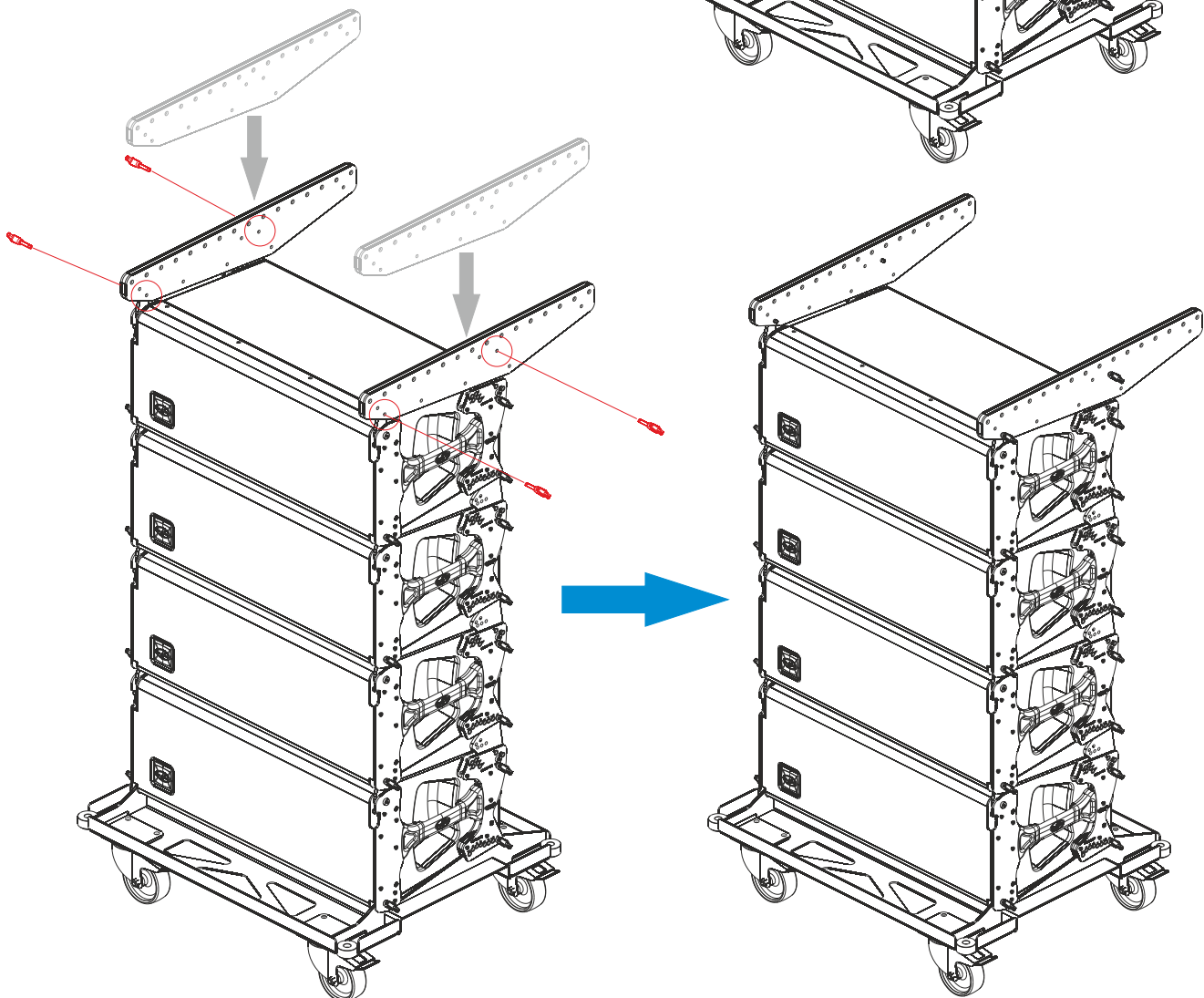
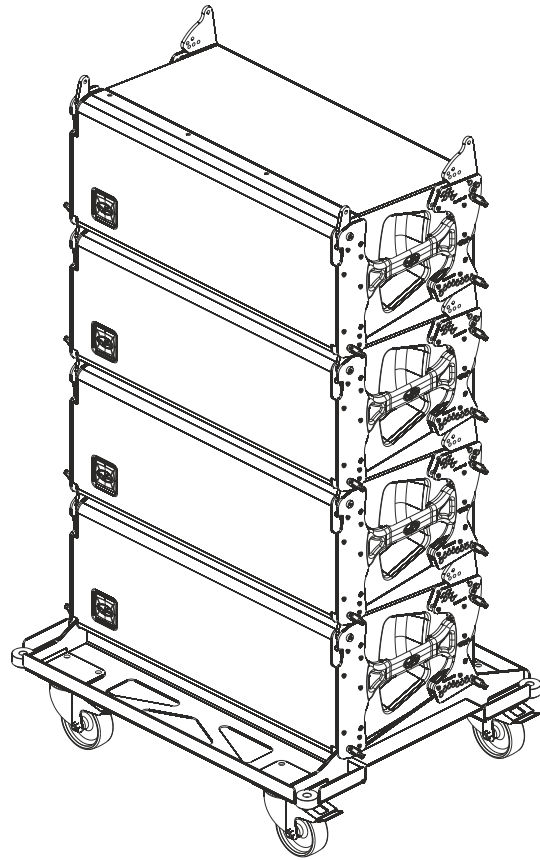
To assemble the correspondent AX, we will lift the hidden front and rear rods on both sides, we will proceed similarly as we have seen in the previous section.

The result is shown in the right figure.

Now, we will assemble the lateral pieces (the pieces of AX with the silkscreen visible from the side). We will insert the security pins as shown down.



**Warning: Verify the correct installation of the security pins. These pins will support the inferior load.**



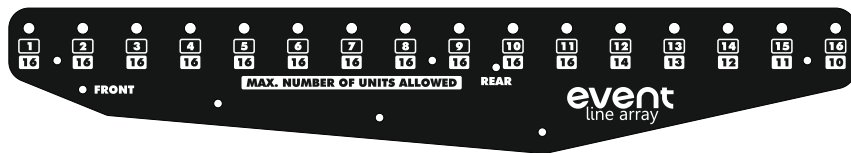
Moreover, we will join the *Pick Up* with the lift motor. If we use two lift motors, we will use a second *Pick Up*.

With the help of the *Ease Focus* software, we can determine which point is the correct one to join the side pieces with the *Pick Up*, with the help of the security pins.

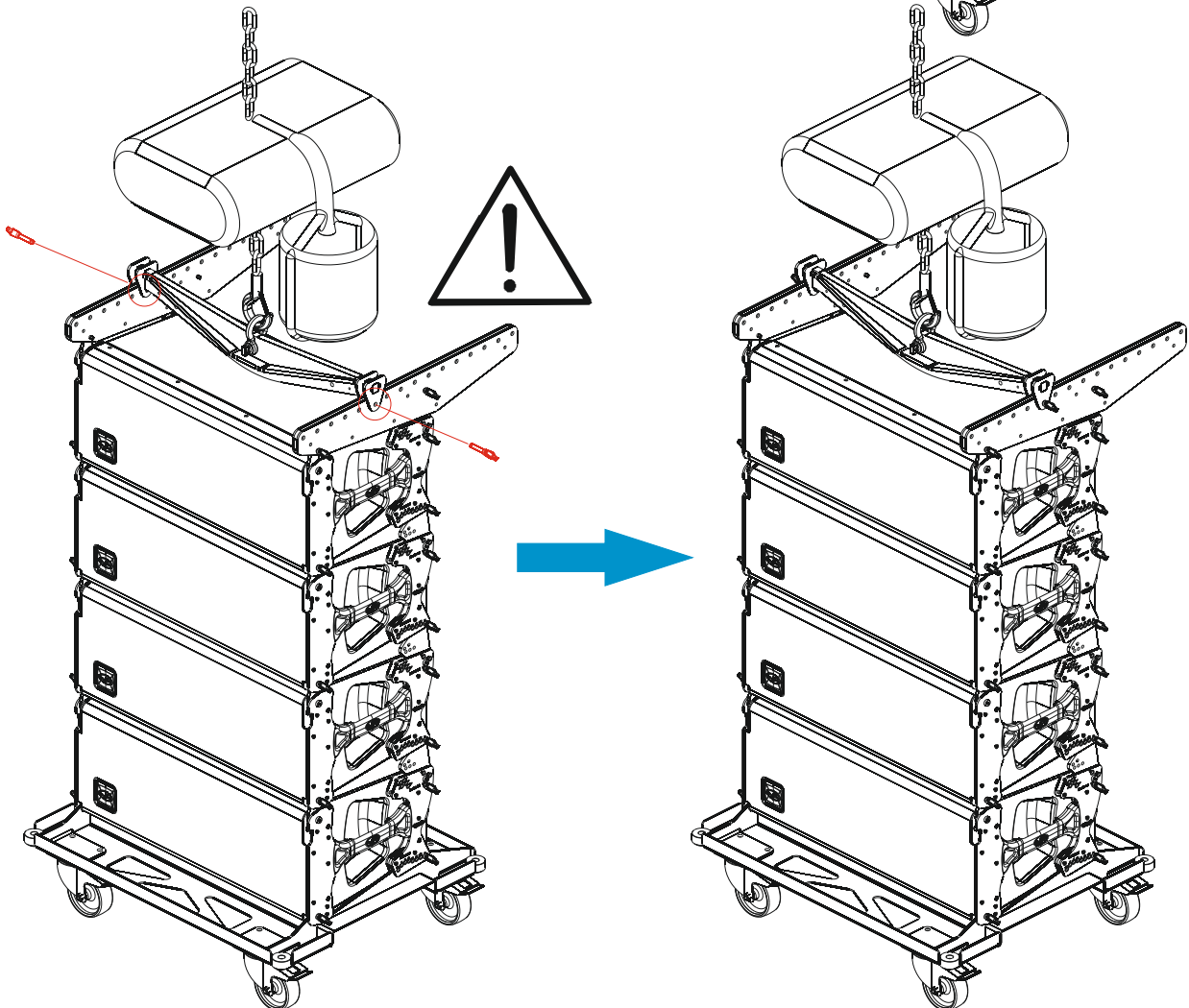
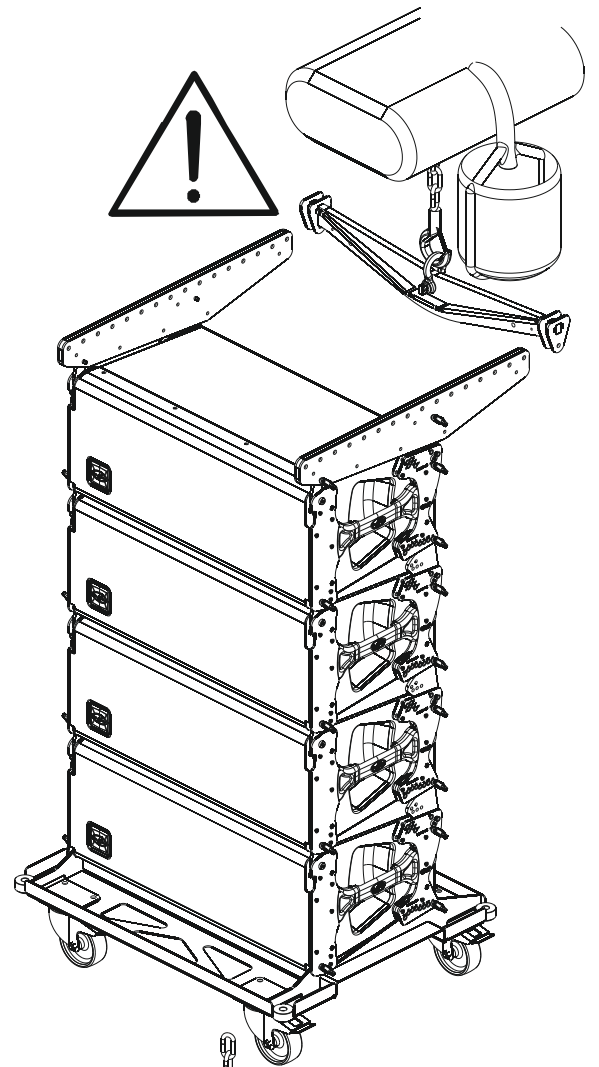
If we use two lift motors, we will use a second *Pick Up* which joins through the same way to the pinpoint marked by *EaseFocus*.



**Warning: Verify the correct installation of the security pins. These pins will support the inferior load.**



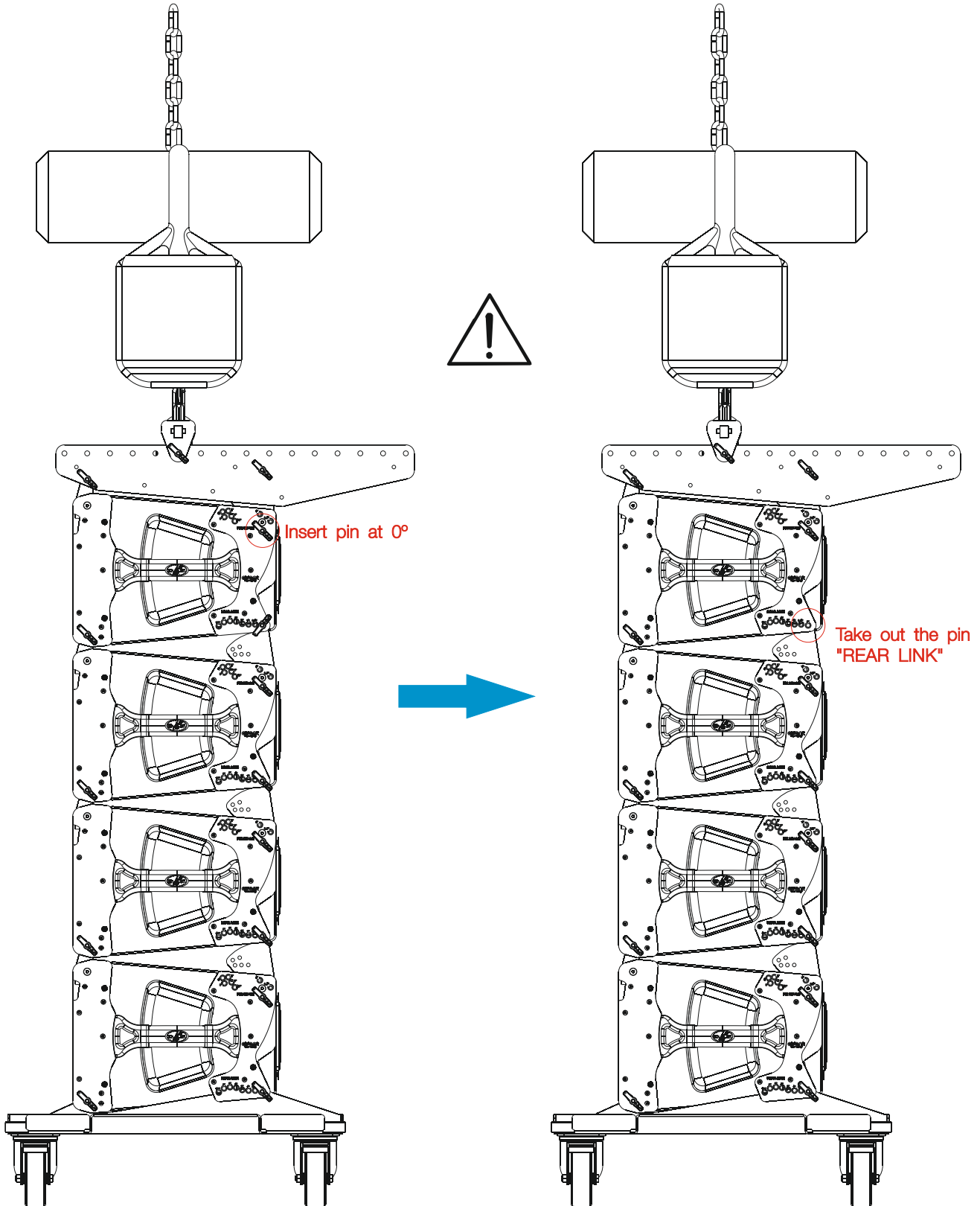
SILKSCREEN'S VIEW



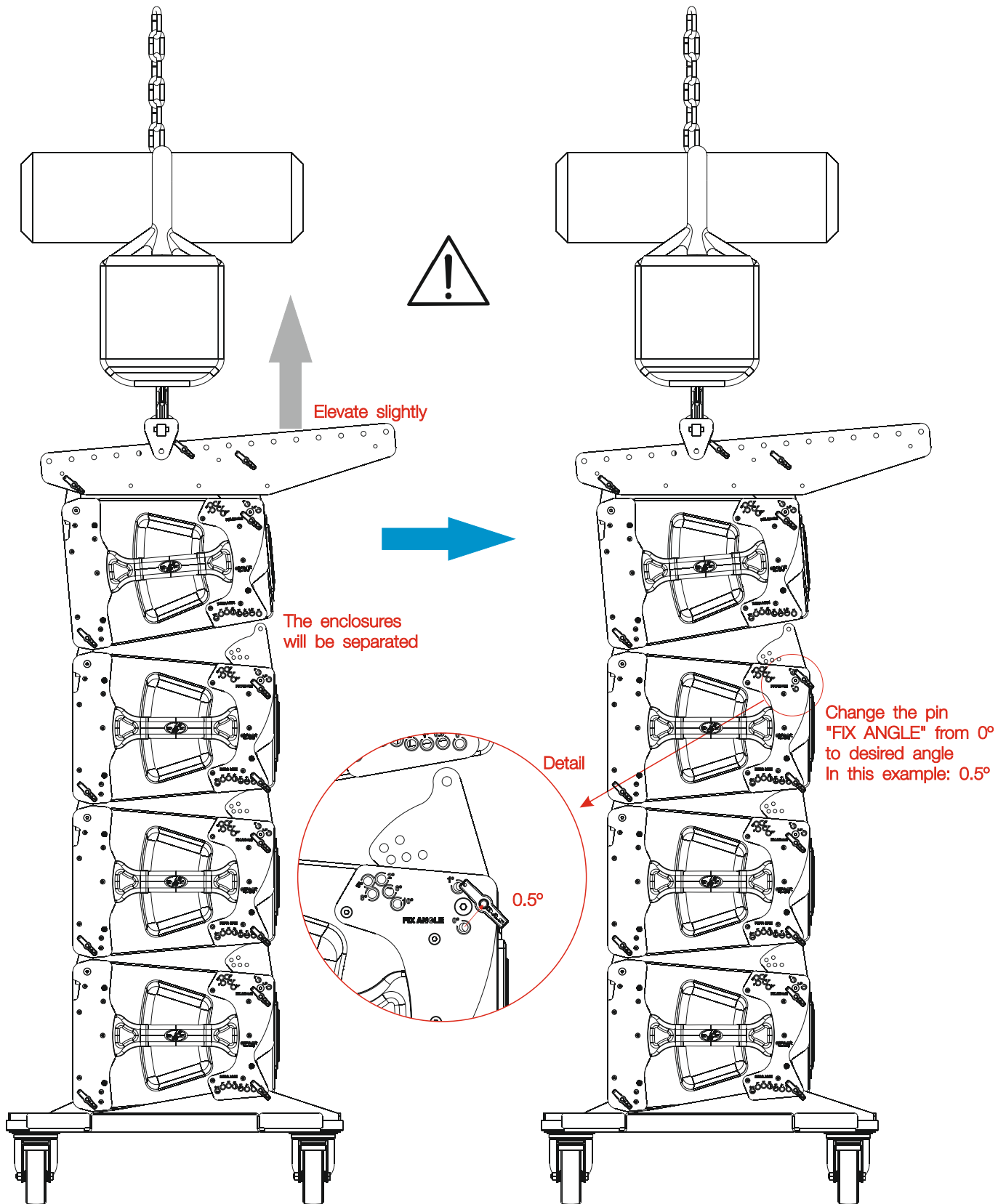
Now, we will proceed to assign the angles to each enclosure.

Note that the angle between the AX and the first enclosure is 0° (the pin is inserted at "Fix angle" hole corresponding to 0°). This is the correct assignation.

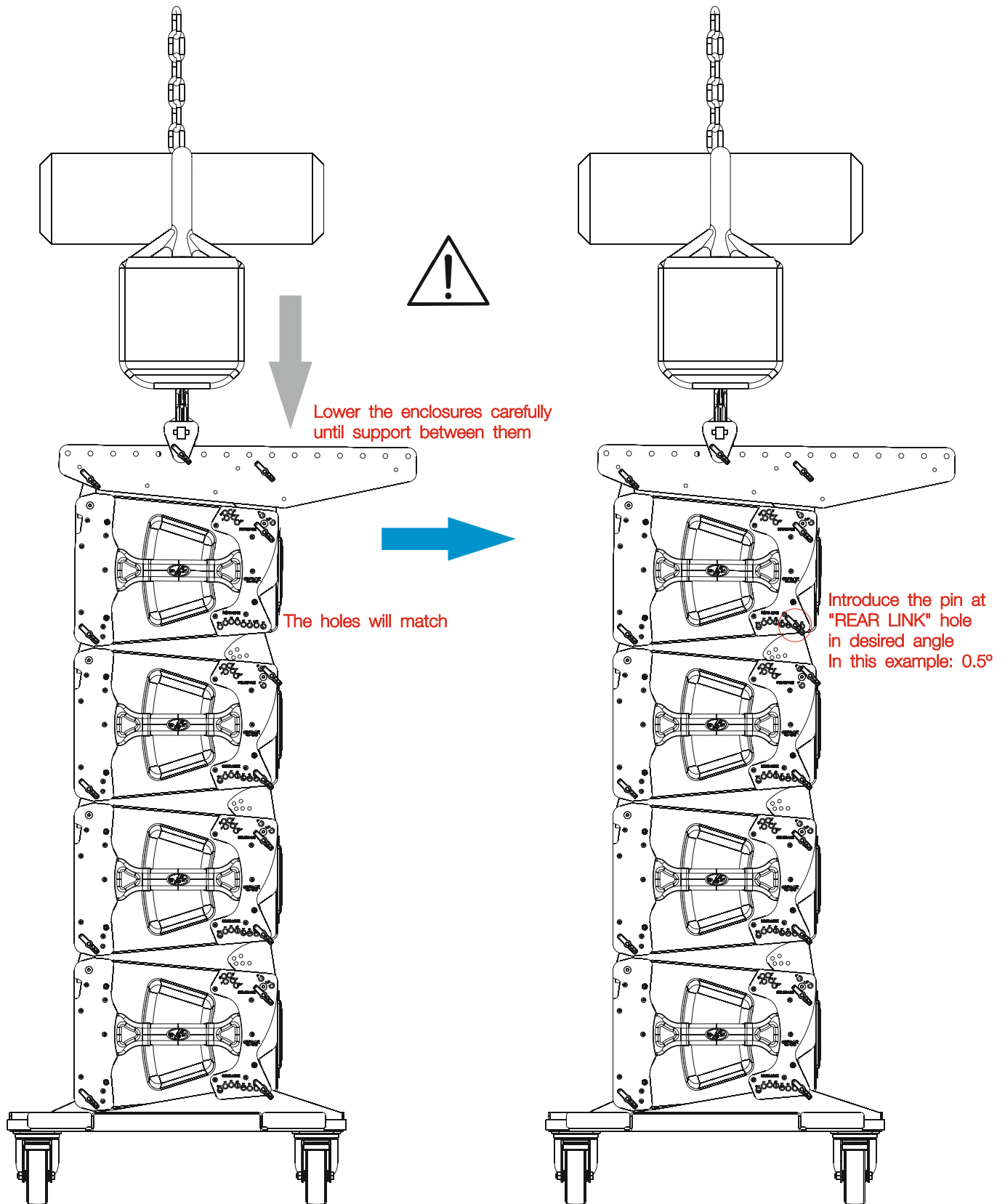
With the help of the *EaseFocus* software we will know the correct angle to each enclosure. This process is similar for all the enclosures.



Now, slightly elevate the enclosure to free the rod and we will insert the security pin into hole "Fix Angle" corresponding to desired angle (see figures down).

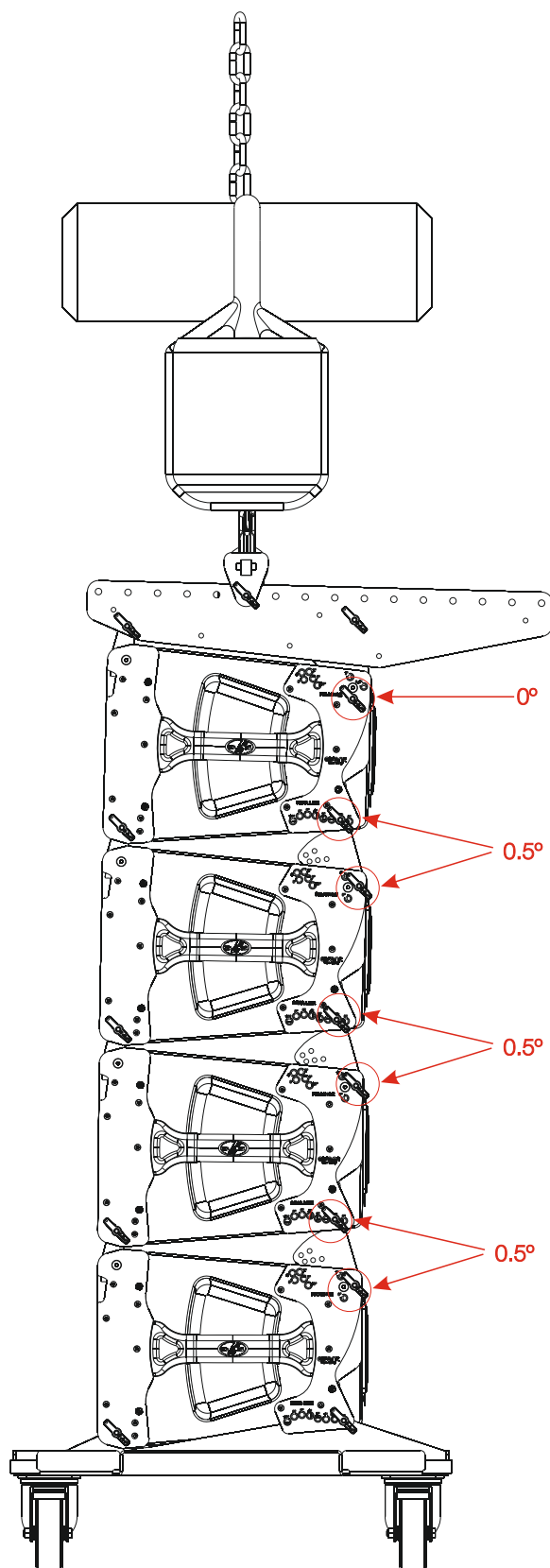


Now, lower the enclosures to return to support between them and will place the safety pin according to the desired angle in "REAR LINK" hole, as shown in the figures below.



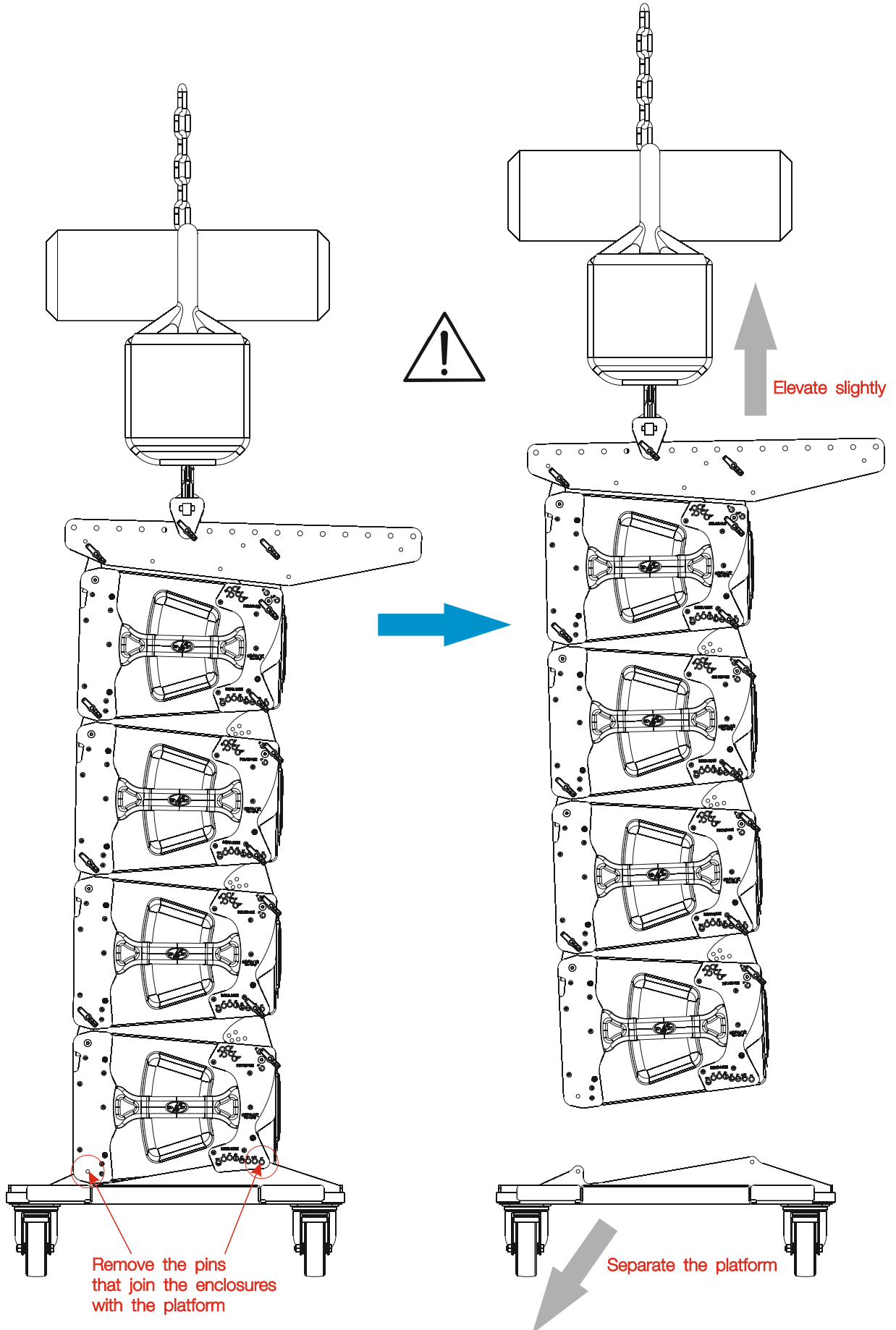


Now, repeat the process described in the pages 9-11 with the other enclosures, and move safety pins according to the desired angles at "FIX ANGLE" and "REAR LINK" holes, the result is shown in the figure below.

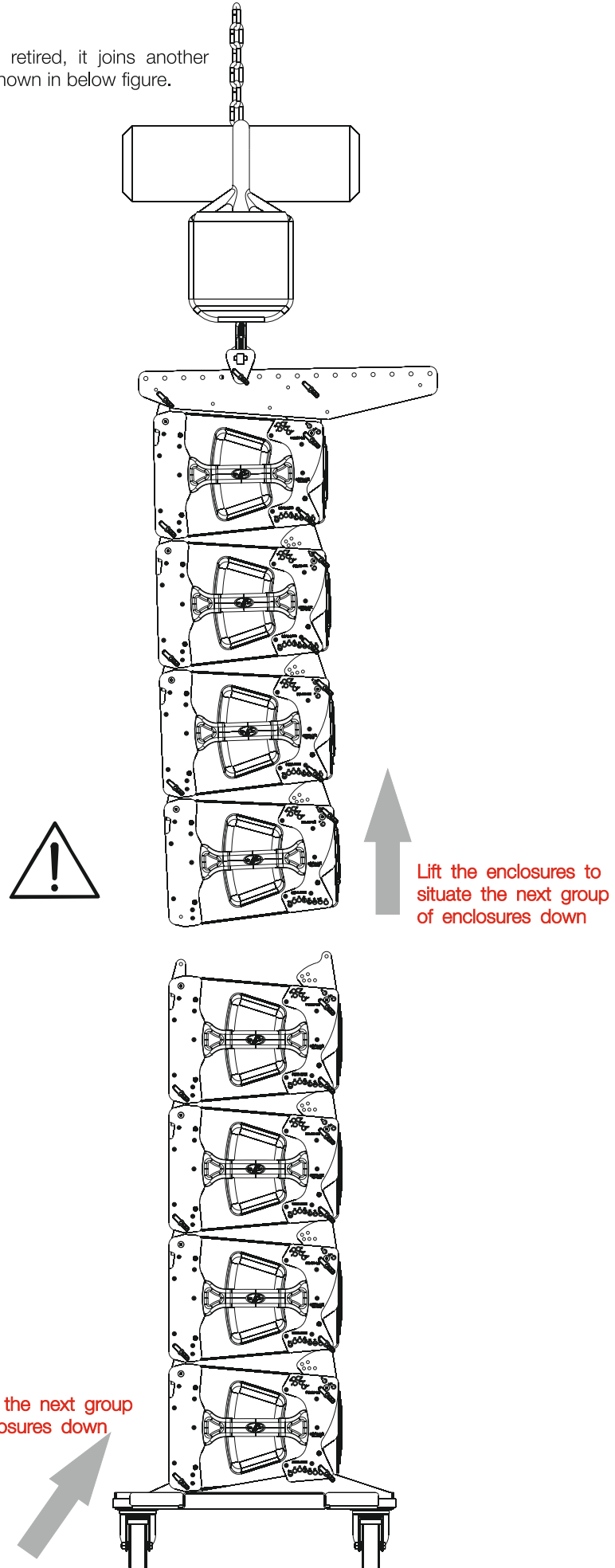




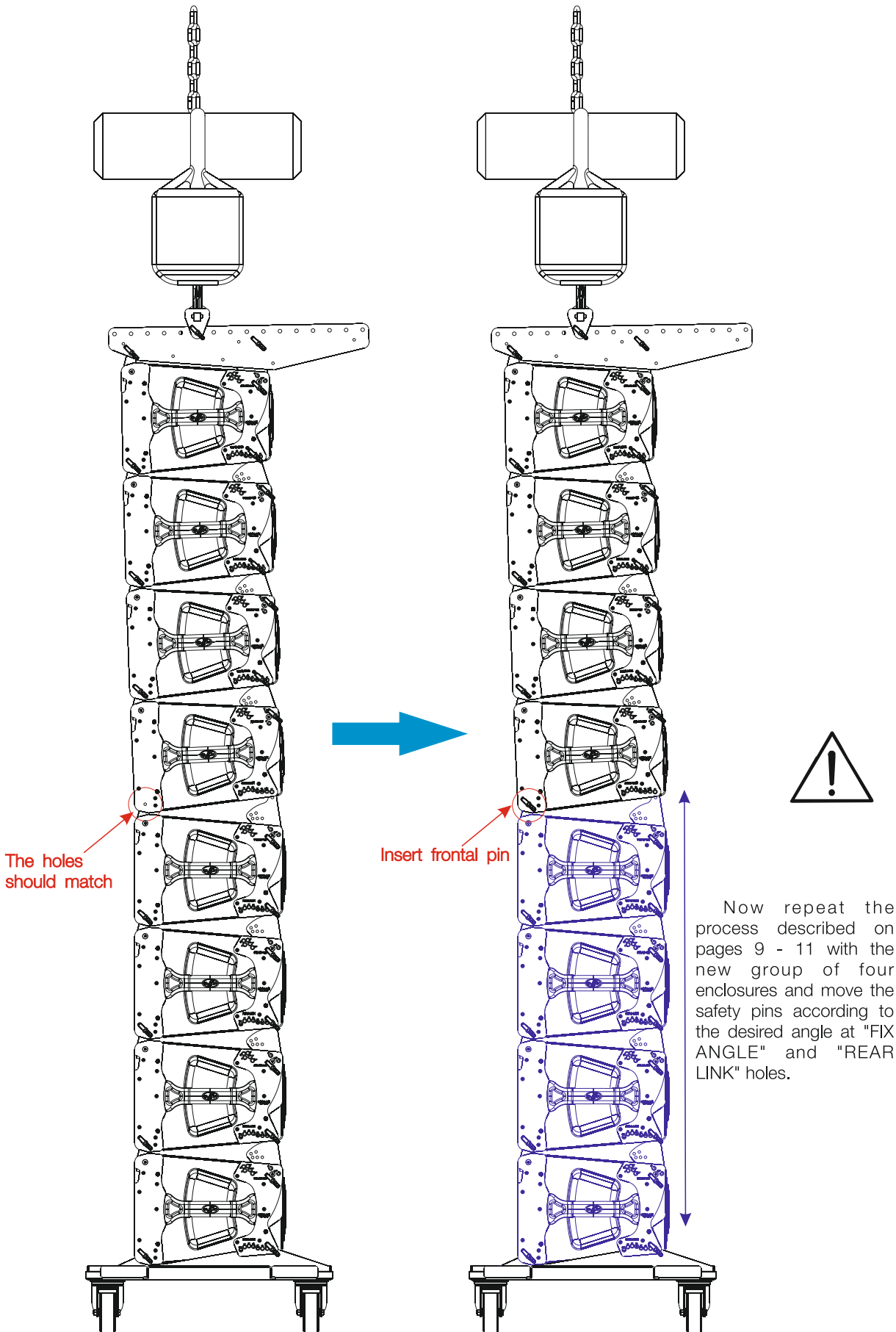
Now, to separate the platform proceed as shown in below figures.



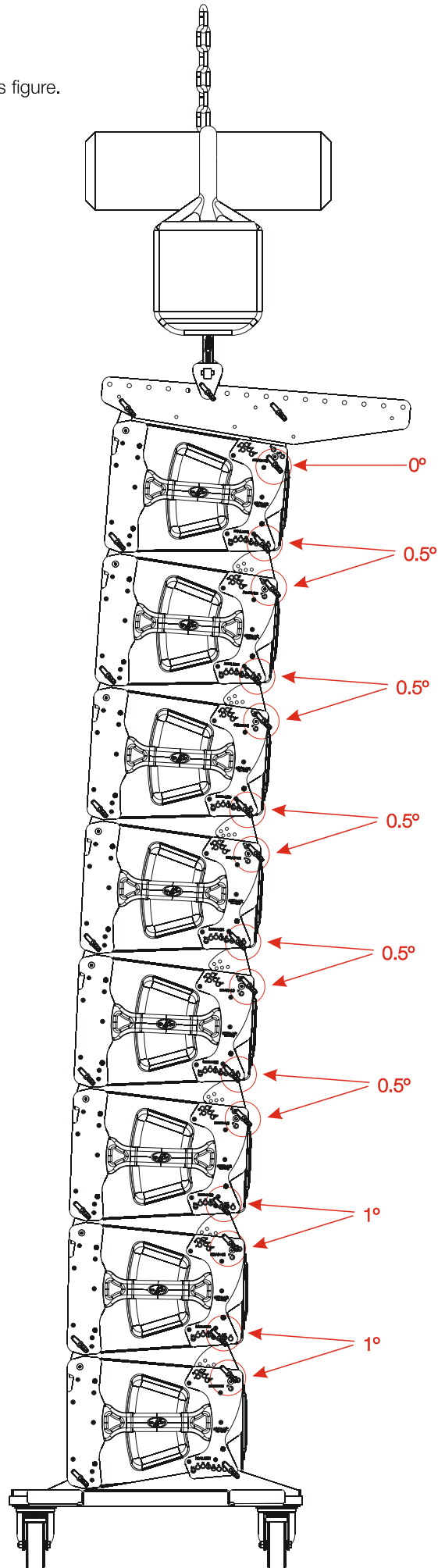
Once the platform is retired, it joins another group of enclosures, as shown in below figure.



Now, we will join the groups, as shown in the below figures.

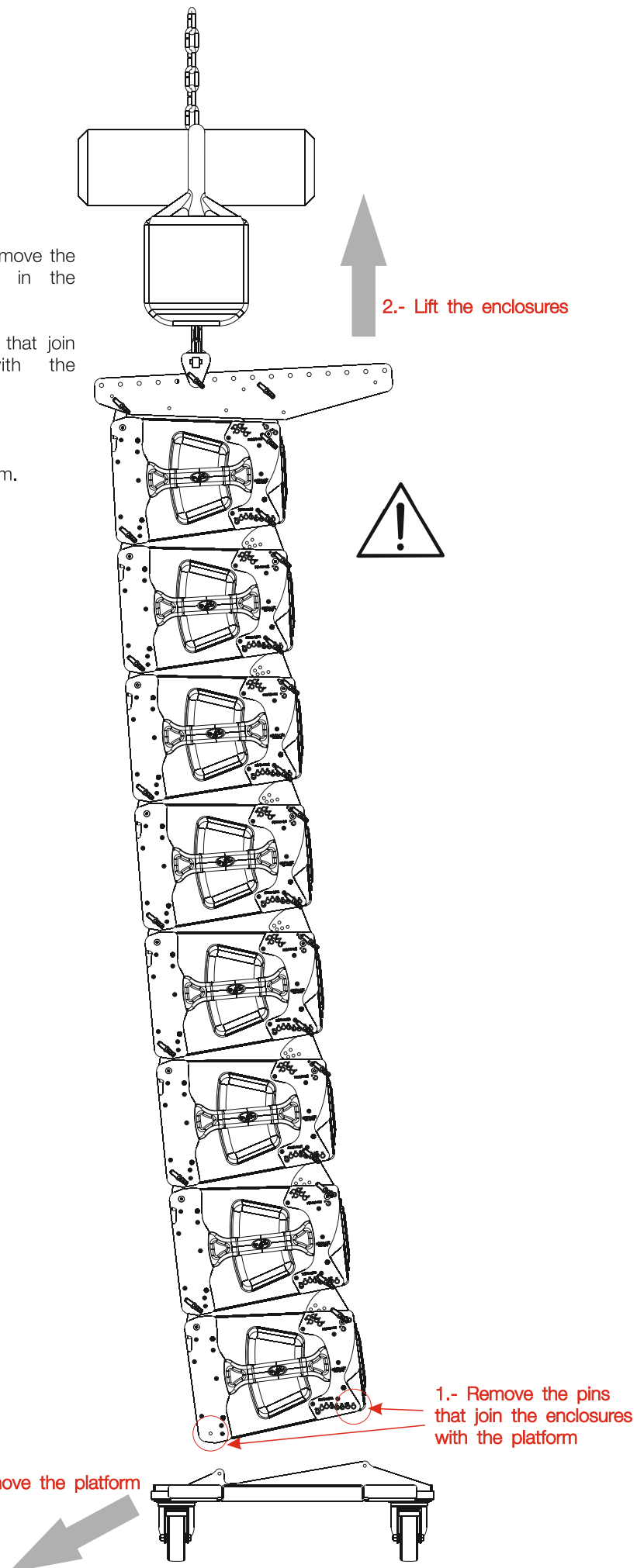


The result is shown in this figure.



Again, we must remove the platform. As shown in the figure:

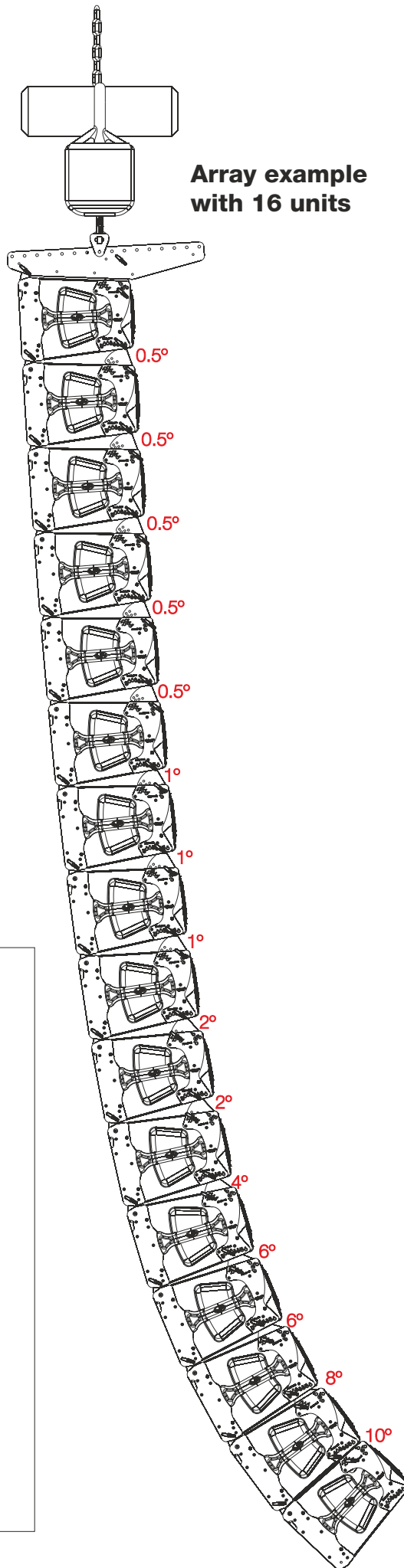
- 1.- Remove the pins that join the enclosures with the platform.
- 2.- Lift the enclosures.
- 3.- Remove the platform.



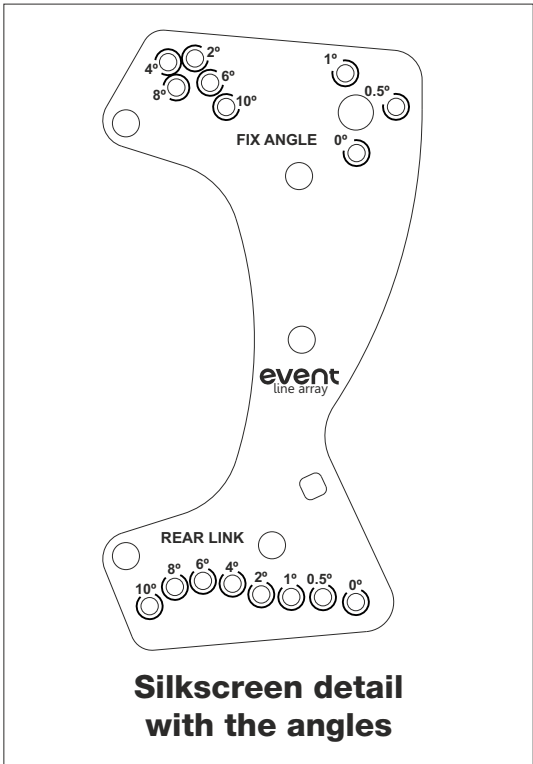
If you repeat the process with other groups then you will obtain an array as shown in the figure, with 16 units.

The described process here, will help you to mount arrays with *EVENT-208A* or *EVENT-210A* units.

The process, as you see, is completely reversible for dismantling the arrays.



**Array example with 16 units**



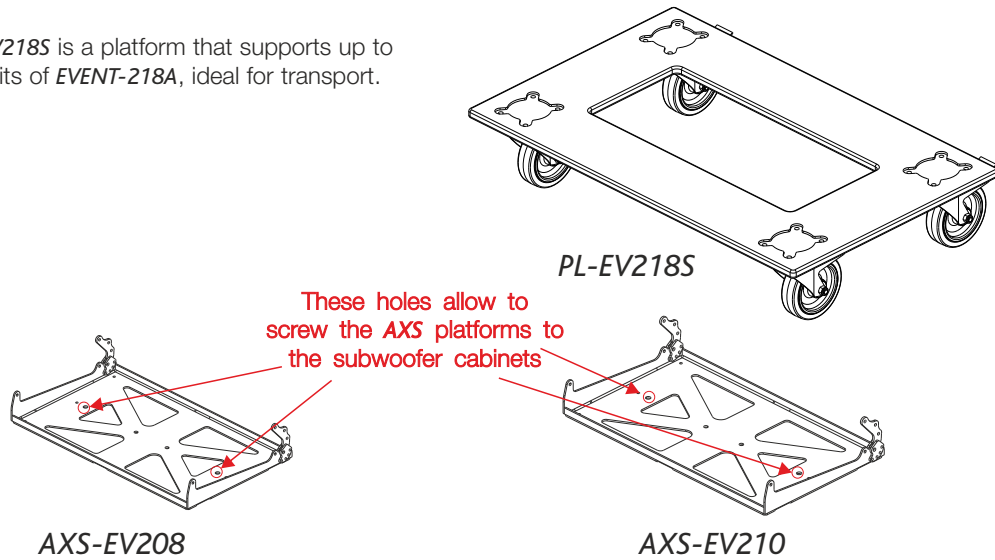
## STACKING SYSTEMS

The *PL-EV208S* and *PL-EV210S* platforms can help transport the units, but if used to stack systems, the array could be unstable, because the array's angles can move the center of gravity. This is the reason why we don't recommend its use to stack systems.

Moreover, the *PL-EV218S* doesn't have this problem, it is possible to use it for stacking systems and to transport them (maximum up to 3 units of *EVENT-218A*).

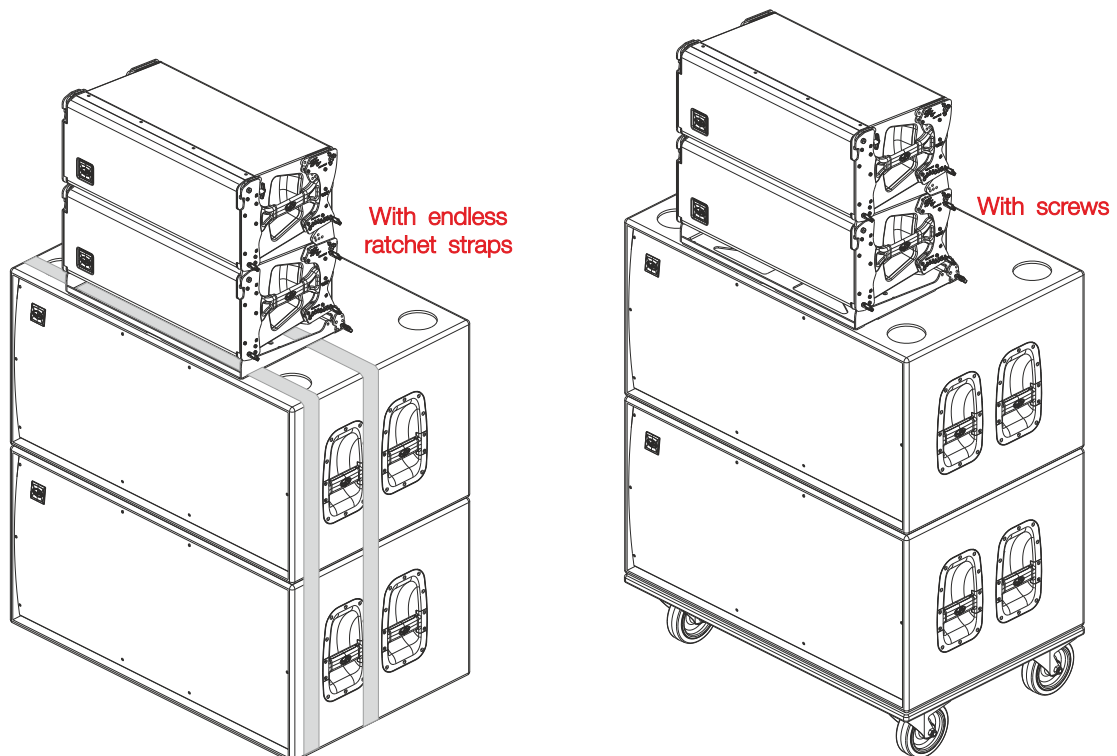
Therefore, we will have the following accessories for stacking systems of *event series*:

The *PL-EV218S* is a platform that supports up to 3 stacked units of *EVENT-218A*, ideal for transport.

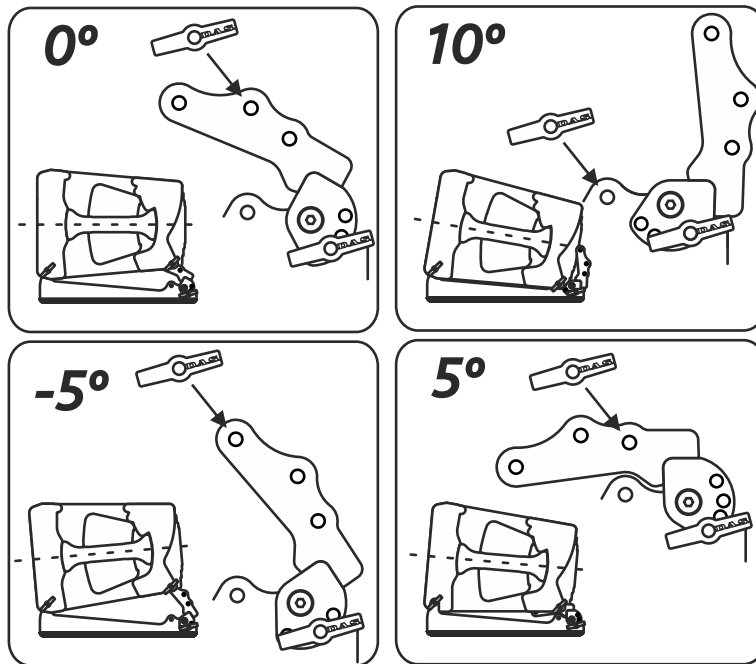


The *AXS-EV208* and *AXS-EV210* are platforms that allow the stacking of *EVENT-208A* and *EVENT-210A* units, respectively (up to maximum of 4 units), over subwoofer cabinets.

**Warning: Join the platforms and the subwoofer cabinets, with screws or with endless ratchet straps (not included), for safe stacking (see the examples below).**



Also, *AXS-EV208* and *AXS-EV210* allow assigning angles to the enclosures easily, following the label's instructions (see the figures below).



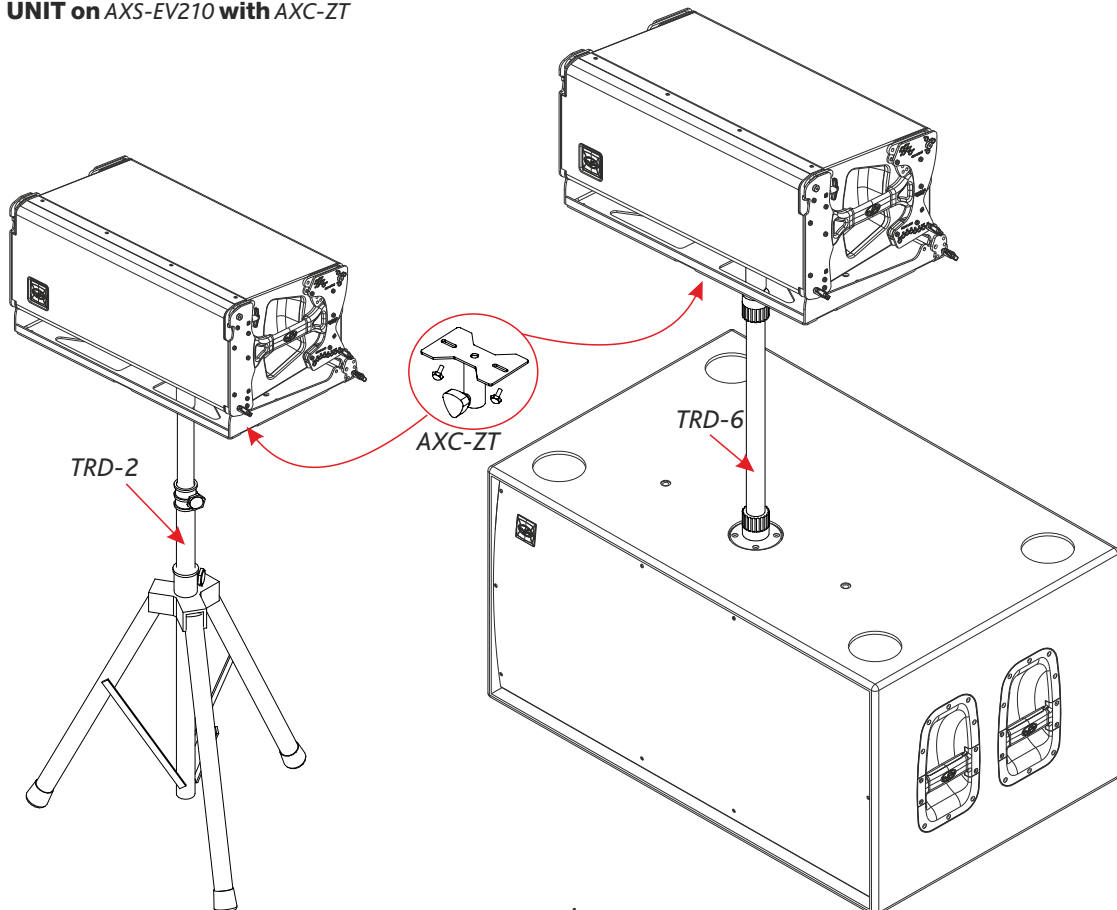
For assemblies as shown in the figures below, the *AXC-ZT* is required with the *AXS-EV208* and *AXS-EV210*.



**Warning: Don't stack more units than recommended on the label:**

**MAX STACKED UNITS):**

- **4 UNITS on *AXS-EV208***
- **4 UNITS on *AXS-EV210***
- **1 UNIT on *AXS-EV208* with *AXC-ZT***
- **1 UNIT on *AXS-EV210* with *AXC-ZT***

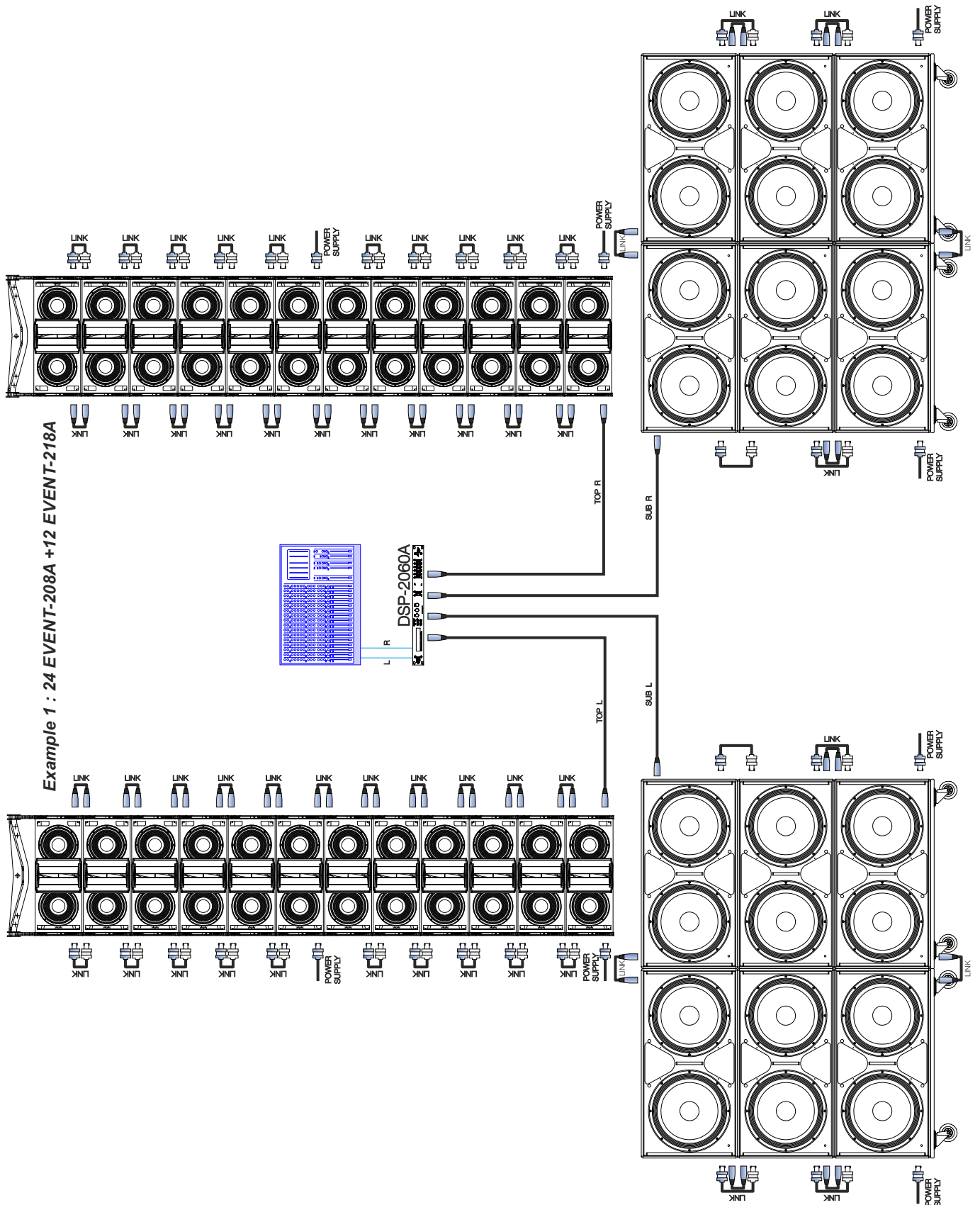




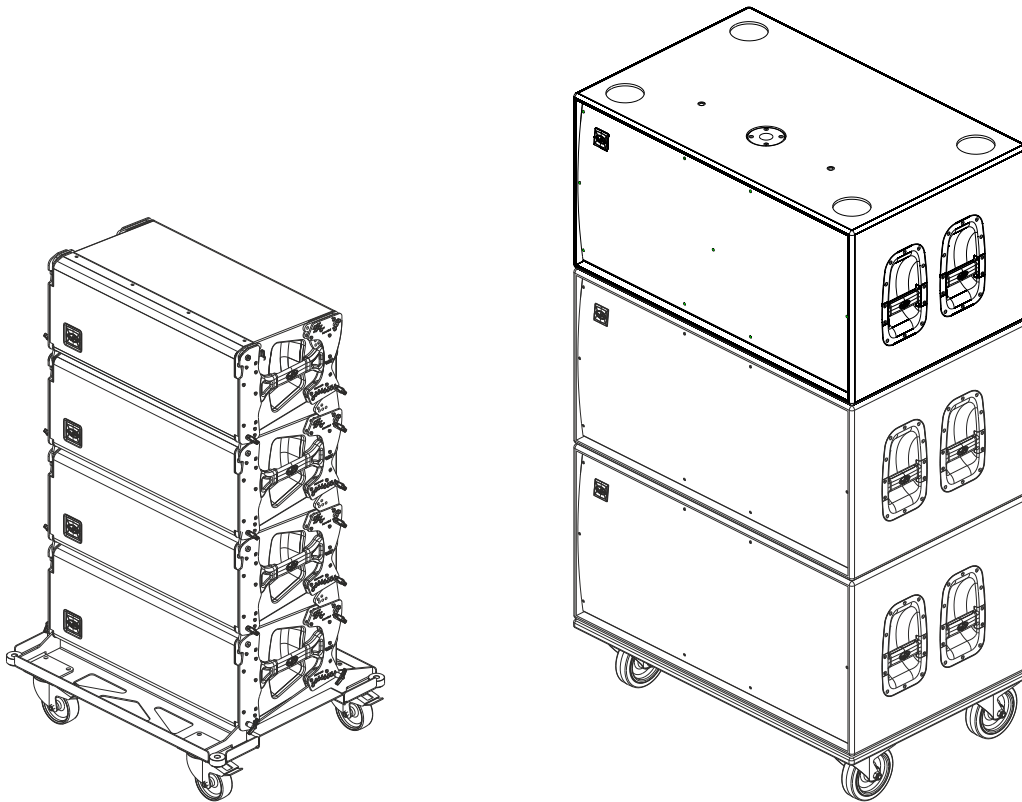
## TRANSPORTING

This section describes *event* units transport recommendations.

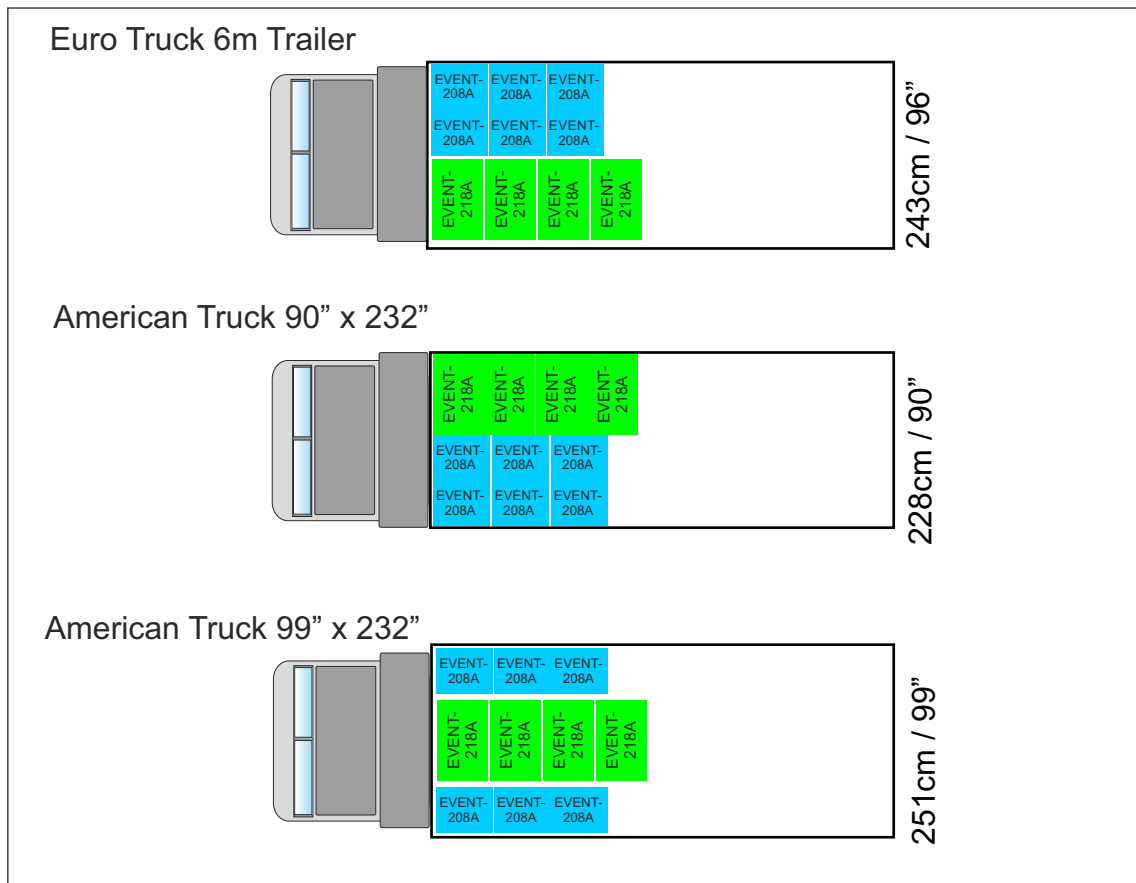
We will start with two examples of configurations and we will recommend different ways of loading them inside a truck.



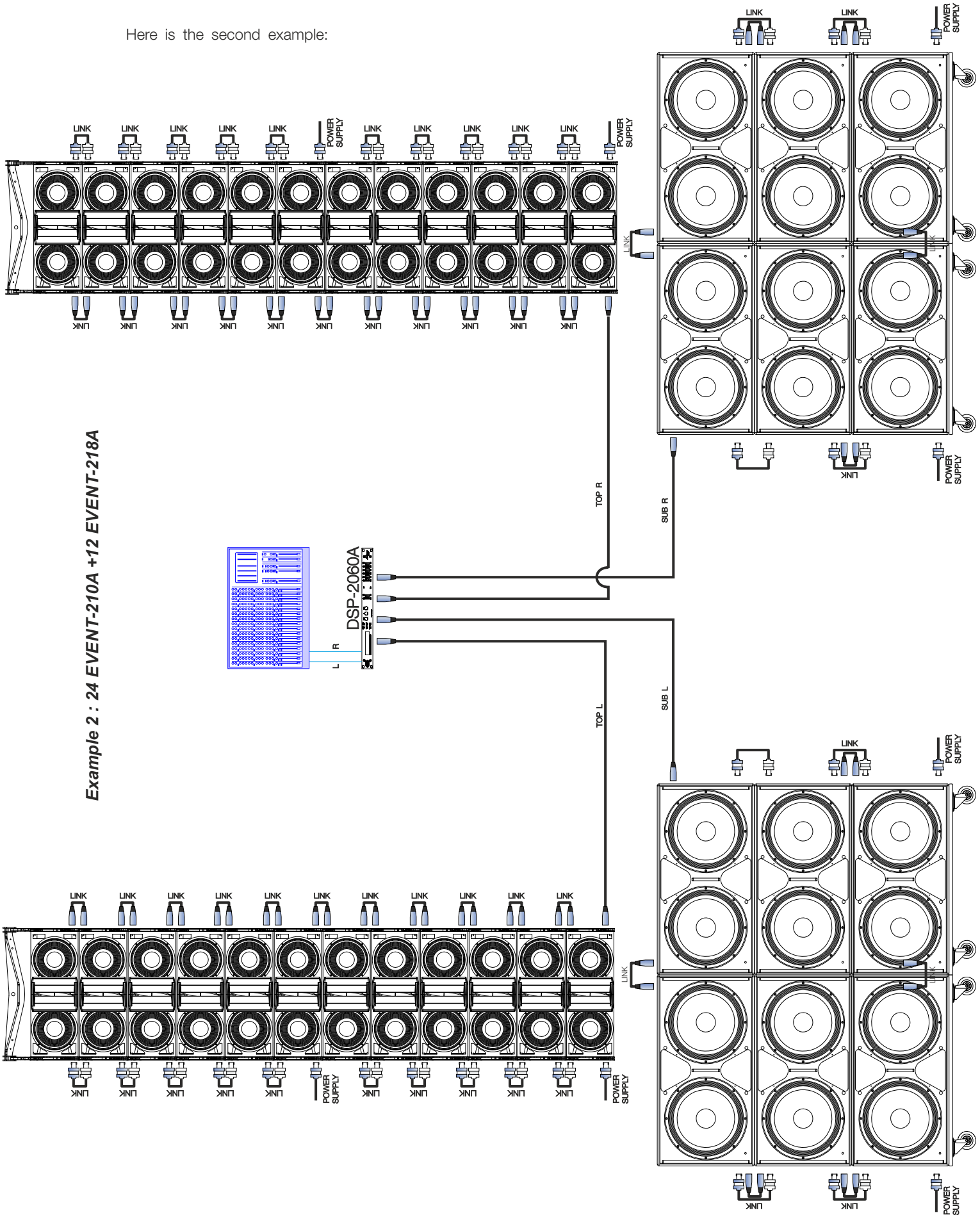
Disassembling 24 units of *EVENT-208A*, we make 6 groups of 4 units on *PL-EV208S* platforms, and, on the other hand, 4 groups of 3 units of *EVENT-218A* on *PL-EV218S* platforms.



The next figures show some cabinet's positions when loading a truck, leaving the rest of the truck for other complementary equipment like cables, etc.

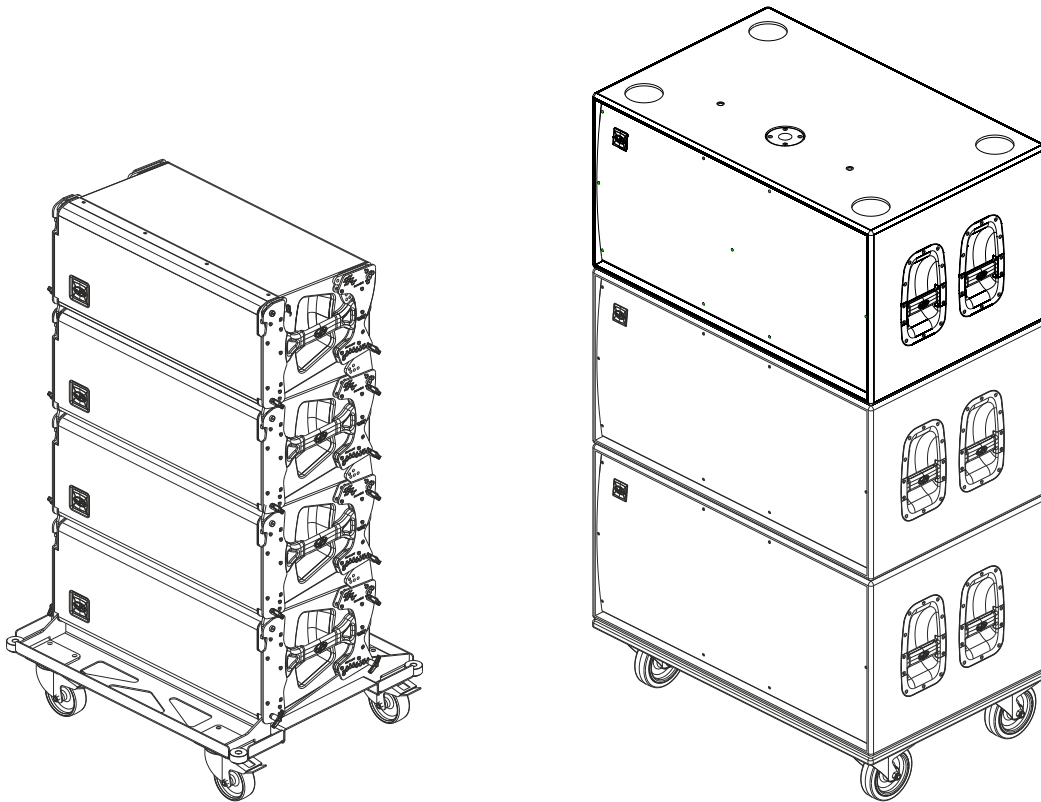


Here is the second example:

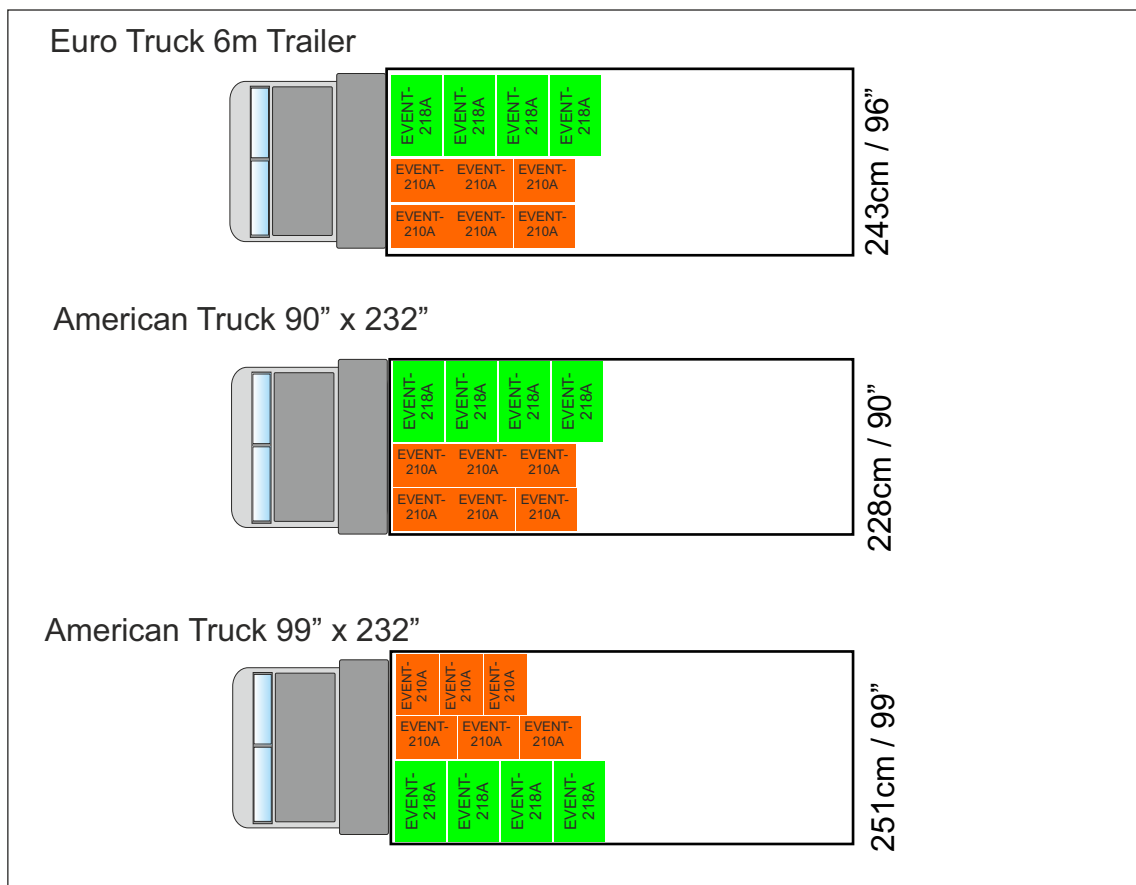


Example 2 : 24 EVENT-210A +12 EVENT-218A

Disassembling 24 units of *EVENT-210A*, we make 6 groups of 4 units on *PL-EV210S* platforms, and, on the other hand, 4 groups of 3 units of *EVENT-218A* on *PL-EV218S* platforms.



The next figures show some cabinet's positions when loading a truck, leaving the rest of the truck for other complementary equipment like cables, etc.





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