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 DAS Audio systems. 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 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 clable 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.
The groups of 3 or 4 units are easy to transport by truck as we will see in this section. We will also see the preparation.

If we look at the **PL-20S**, we will see the two security pins on the sides (see figure). These pins allow to hold the first enclosure to the platform.

Warning: Make sure the trigger is hidden, blocking the angle, so that the box is fixed to the platform safely.

When you push the trigger, you will block **AERO-20A** angles.
Lift the enclosure by the handles and sit it gently over the platform.

Remove the security pins and hold the enclosure with them.

Check that the four security pins are well positioned.

Final mounting of one enclosure on a PL-20S platform.
Let's add another enclosure over the previous.

We need to look at the side controls of the enclosure and act on them like in the figure.

We push up the front rods (as seen in the figure), we will deploy them and we will lock them into position. Make sure they are properly locked for safety.

The front rod remains locked, unless you press the front triggers so that we can bring it to its initial position, folded on the side.

The result, platform included, can be seen in the figure below.

Figure of the enclosure on the platform PL-20S with the rods ready to add another enclosure over it.
Now we unlock the angle in the second box, before leaning it on the first (in this configuration the rear trigger is hidden).

To do this we will move the handles on the sides of the box up to the end where you will hear a click.

At that time the rear trigger will come out, the handle will lock, and it will unlock the angle.

Taking the second enclosure by the handles, we will lower it gently upon the first enclosure, until it rests upon it.

Remove the safety pins on each side of the enclosure, and to anchor the enclosure we will use these pins, as shown in the figures.

Note: We can leave the front rods prepared for stacking the third box.

This figure shows mounting of two enclosures on a PL-20S platform.
Once the second enclosure is supported by the first and the front safety pins are positioned, we will choose 7º (which is the maximum possible for this model), with the angle selector and we will put the rear safety pins on the first enclosure (two on each side of the enclosures): put pins in REAR LINK holes of second enclosure and others, in the holes corresponding to 7º angle, on the first enclosure (as shown in the figures below).

Check that all safety pins are located correctly because they will have to withstand the weight of all the enclosures.

This figure shows final mounting of two enclosures on a PL-20S platform.
Now we should unlock the angle in the third enclosure to place it on the second (in this configuration the rear trigger is hidden, as seen on page 7).

To do this we will move the handles on the sides of the enclosure up to the end where you will hear a click.

At that time the rear trigger will come out, the moved handle will be locked and it will unlock the angle.

Taking the third enclosure by the handles, we will lower it gently upon the second enclosure, until it rests upon it.

Remove the safety pins on each side of the box and to anchor the enclosure we will use these pins as shown in the figures, on page 7.

Once the third enclosure is supported by the second and the front safety pins are positioned, we will choose also 7º with the angle selector and we will put the rear safety pins on the second enclosure (two on each side of the enclosures); put pins in REAR LINK holes of third enclosure and others, in the holes corresponding to 7º angle, on the second enclosure (as shown in the figures below and as seen on page 8).

Check that all safety pins are located correctly because they will have to withstand the weight of all the enclosures.

These figures show final mounting of three enclosures on a PL-20S platform. We can leave the front rods prepared for stacking the fourth enclosure, only if the group isn’t finished.
Now we should unlock the angle in the fourth enclosure to place it on the third (in this configuration the rear trigger is hidden, as seen on page 7).

To do this we will move the handles on the sides of the enclosure up to the end where you will hear a click.

At that time the rear trigger will come out, the moved handle will be locked and it will unlock the angle. Taking the fourth enclosure by the handles, we will lower it gently upon the third enclosure, until it rests upon it.

Remove the safety pins on each side of the box and to anchor the enclosure we will use these pins as shown in the figures, on page 7.

Once the fourth enclosure is supported by the third and the front safety pins are positioned, we will choose also 7º with the angle selector and we will put the rear safety pins on the second enclosure (two on each side of the enclosures): put pins in REAR LINK holes of fourth enclosure and others, in the holes corresponding to 7º angle, on the third enclosure (as shown in the figures below and as seen on page 8).

Check that all safety pins are located correctly because they will have to withstand the weight of all the enclosures.

These figures show final mounting of four enclosures on a PL-20S platform.

Do not stack more than four boxes so as not to endanger stability.
The groups of 3 or 4 units are easy to transport by truck.

Let's see in this section how to mount an array with groups of four units.

Firstly, we will mount the AX-AE20 onto the top enclosure of the first group of four units.

Therefore, to mount the AX, the rods of the upper unit of the group should be extracted, as explained in the previous section.

The result is shown in the figure at the right.

Then, place the side parts of the AX inserting safety pins, as shown in the figure below.

Check that the security pins are well positioned because they will support the weight of the rest of the enclosures.
With the help of the *Ease Focus* software we can determinate which point is the correct one to join the side pieces with the crossbar of the AX-AE20, called PICKUP-AX-AE20, and with the help of the security pins, as shown in figures.

If we use two lift motors, we will use a second PICKUP-AX-AE20 which joins through the same way to the pinpoint marked by *Ease Focus* software.

Check that the security pins are well positioned.

Lastly, hook the lift motor. In case two lift motors are needed, hook each one to each PICKUP-AX-AE20.

Like in every security operation, use adequate security elements.
Proceed to assign the angles to each enclosure.

Note that the angle for the first enclosure is 0º (the security pin is positioned in the SELECT ANGLE hole for this angle). This is the right position for it.

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

But first, pay attention to the silkscreen on the enclosure’s side.

We can see that there are two types of lines (continuous and discontinuous), with two colors (white and blue).

Thus, each selectable angle is matched with a hole to fix a security pin, i.e., a hole presents the same type of line and color that the angle chosen with the angle selector handle.

Therefore, if we choose an angle, we will place a security pin in the hole with the same type of line and color (see example below).

Example: SELECT ANGLE = 7º
Now, we shall proceed to assign the angles between each pair of enclosures.

Remember that the angle for the first enclosure is 0º (the security pin is positioned in the SELECT ANGLE hole for this angle). This is the right position for it.

Also remember that you have to do the same in the reciprocal sides of the same boxes (in the figures only one side is illustrated).

1.- Take out the security pin from the SELECT ANGLE hole of the lower enclosure.

2.- Select the desired angle, for example 1º.

3.- Replace the security pin in the appropriate "SELECT ANGLE" hole. In the example, into 1º (this hole is the same as for 7º, 5º, 3º and 1º).

4.- Push the rear trigger to lock the angle in each side of the enclosure.
Once that we have assigned the angle between the first pair of enclosures, acting on both sides of enclosures, we shall repeat the same process to select the angle between the second and third. And so on until the last.

We shall reallocate the angles of the example so that they may be more usual angles, we are going to think of an array consisting of 8 enclosures.

**Note:** The selected angles will be visible when we lift the enclosures, so before lifting the group you can easily assign, and change, angles.

In this new case, we shall assign:
- Between first and second: 0.5 °
- Between second and third: 1
- Between third and fourth: 1.5 °

Note that the angle is obtained by acting on the lower enclosure, so that we may have determined angle between the fourth and fifth enclosures, you should act on the fifth when you have added it.

At this point, so that we may add more enclosures we should disengage the platform.

As shown in the figures: First we will remove the security pins of the platform (4 units) and then we shall lift the group of enclosures.

When lifting, we see that the group separates from the platform, and we shall hear a few clicks when selected angles will be blocked between the enclosures.
This figure shows the result when we lift the group.
Now, we shall proceed to assign the angles in the next group of 4 units, as before, with the same procedure we shall assign:
- Between fourth and fifth: 2°
- Between the fifth and sixth: 4°
- Between the sixth and seventh: 6°
- Between the seventh and eighth: 7°
As we have done before and according to the following figures.

1.- First, we will draw the rods from the upper unit (box No.5) of the new group of boxes (as on page 11). Then we shall assign the angle between the upper enclosure of the next group and the lower enclosure of the previous group. For this, we will insert the security pins in the SELECT ANGLE holes corresponding to 2°.

2.- We shall let down the previous group until the front rods of the upper box of the new group (box No.5) are aligned with the holes of the lower enclosure of the previous group (box No.4). Then we shall put the security pins to link the front.

3.- We shall continue lowering the upper group until fully supported by the lower group. Finally, we will put the security pins in REAR LINK holes of box No.4, joining all boxes.
Once the upper enclosure of the new group is joined, we will assign the angles of the other enclosures, following the instructions of the *Ease Focus* software.

In this example:
- Between fourth and fifth: 2º
- Between fifth and sixth: 4º
- Between sixth and seventh: 6º
- Between seventh and eighth: 7º

The procedure for assigning angles to the boxes is the same as described with the first group of 4 units.

As already mentioned, **after assigning the angle you need, you will have to press the rear trigger to lock it.**

The same applies to the process for removing the platform.
Here, the figures show final mounting for this example of a typical array with 8 units.
The groups of 4 units are easy to transport by truck as we shall see below. This section describes how to disassemble an array in groups of 4 units.

First, we go down aligning the array with the platform *PL-20S*, as shown in the figures below.
Before supporting the array on the platform, it is important to unlock the angles of the corresponding boxes (see figure boxes No.2, No.3 and No.4, leaving the No.1 blocked), just as seen on page 7, so that the angles can fold, when we go down with the enclosures, onto the platform.
Now, we shall give the two lateral pins of the platform a half turn as shown in the below figure (1). This will allow us to release the tray of the platform (2) and raise it. Align the front holes of the tray and the enclosure, and link them with two security pins (3).

Then we will go down the array until it rests on the platform (4). **Be very careful with this operation to avoid accidents. Use personal safety elements required as safety shoes, gloves, etc.**

We will turn the lateral pins of the platform so that the tray is blocked and, finally, place the security pins in the REAR LINK holes (5).
Now, we will continue going down the array, resting it on the platform. When the four lower boxes are resting, we shall proceed to remove the security pins, as shown in the following figures.

1. We shall remove the security pins of the REAR LINK holes of the upper box.

2. Then we shall remove the front security pins.

3. We shall lift the rest of the array a little and we shall draw this group of boxes from under the top group, then we shall fold the front rods acting on the front trigger, we will remove the security pins of SELECT ANGLE holes and we will move the handles to STORE position (folding the rear rods).

To disassemble the remaining enclosures, we shall proceed as with the first group.
The AERO-20A and AERO-40A units can be combined to form an array. This type of mixed array requires an accessory, the AX-COMBO2040. In this section we will learn how to use it.

The AX-COMBO2040 should be mounted on the aero20A group as shown in the figures.

Check that all security pins are located correctly because they will withstand the weight of all the AERO-20A enclosures.

In our website you will find an explanatory guide to the different types of DAS Audio Group, S.L. security pins, and where they are used, with explanatory drawings.

The result can be seen in the figure below.
As shown in the following figures, AERO-20A and AERO-40A enclosures joined by the AX-COMBO2040 accessory.

Check that all security pins are located correctly because they will have to withstand the weight of all the enclosures. They are of different sizes and are placed in both sides of the accessory.

In our website you will find an explanatory guide to the different types of security pins provided by DAS Audio Group, S.L., and where they are used, with explanatory drawings. Here, is a chart with the different sizes.

<table>
<thead>
<tr>
<th>PIN</th>
<th>Ø (mm)</th>
<th>L (mm)</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN-6-C</td>
<td>6</td>
<td>15</td>
<td>30003600</td>
</tr>
<tr>
<td>PIN-6</td>
<td>6</td>
<td>23</td>
<td>30002878</td>
</tr>
<tr>
<td>PIN-8-C</td>
<td>8</td>
<td>22</td>
<td>30006080</td>
</tr>
<tr>
<td>PIN-8</td>
<td>8</td>
<td>30</td>
<td>30002877</td>
</tr>
</tbody>
</table>
The result, when we lower the array of AERO-40A onto an AERO-20A group and join them, we will have:

The result is shown in the figure at the right.

It will suffice with that we lift the array, remove the platform and secure the array to the correct height, to complete the assembly of this combination of boxes.

To disassemble, we must continue with the same sequence of steps, but in reverse order.

Note: Save the PIN 8 type in the interior holes of AX-COMBO2040, to prevent loss.
STACKING SYSTEMS

The **PL-20S** platform 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.

However, the **PL-218CS** doesn’t have this problem, so it is possible to use it for stacking systems and to transport them (maximum of 3 units of any version of **LX-218CA**).

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

The **PL-218CS** is a platform that allows the transportation and stacking use, up to 3 stacked units of **LX-218CA** (all versions).

**AXS-AE20**

WLL: 150 kg

The **AXS-AE20** is a platform that allow the stacking of **AERO-20A** units (up to a maximum of 4 units), over subwoofer enclosures.

**Warning:** The platform and the subwoofer enclosures should be joined, with screws or with endless ratchet straps (not included), for a safe stacking (see the examples below).
The **AXS-AE20** accessory allows assigning angles to the enclosures easily, following the instructions (see the figures below).

The **AXS-AE20** accessory in combination with the **AXC-ZT** accessory allows for system applications as shown in the lower figures.

**Warning:** Don’t stack more units than recommended:

**MAX STACKED UNITS:**

- **4 UNITS** on **AXS-AE20**
- **1 UNIT** on **AXS-AE20 with AXC-ZT**
TRANSPORTING

This section describes aero unit transport recommendations. We will start with two examples of configurations and we will recommend different ways of loading them inside a truck.
<table>
<thead>
<tr>
<th>Accessories</th>
<th>Dollies</th>
<th>DASnet Splitters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speaker cabling</strong></td>
<td><strong>PL-20S metal transport dolly for 3/4 AERO-20A</strong> x 4</td>
<td><strong>Steel case intended for distribution of analog audio, monitoring data and power to multiple devices. It includes: one input power (1 x powerCon true 1) and 3 power outputs (3 x powerCon NAC3MPB). One audio+monitoring data input, and three audio + monitoring data outputs</strong></td>
</tr>
<tr>
<td>eCP_20 (CAT 7 ethernet cable + 3x2.5mm², audio + data + power, 20m length) x 8</td>
<td><strong>DSP-2060A</strong> x 1</td>
<td></td>
</tr>
<tr>
<td>eCP_3 (CAT 7 ethernet cable + 3x2.5mm², 3m length) x 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eC_09 (CAT 7 ethernet cable; audio + data, 90cm length) x 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plink1_09 (power link 2.5mm² 90cm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DASnet-Rack 26 (1 DASnet patch 26 + power distro 32Amp)**

**Covers**
- FUN-4-AE20 is a protective nylon cover for 4 AERO-20A x 4
- FUN-2-LX218C nylon cover for a stack of 3 LX-218CA-NET x 4

**Rigging frames**
- AX-AE20 x 2

**Dollies**
- PL-218CS The PL-218CS dolly is used to transport stacks of 2 or 3 LX-218CA-NET. x 4

<table>
<thead>
<tr>
<th>16 AERO-20A + 8 LX-218CA-NET</th>
<th>16 AERO-20A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro truck 6m Trailer</td>
<td></td>
</tr>
<tr>
<td>243cm / 96&quot;</td>
<td>243cm / 96&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>American Truck 90&quot; x 232&quot;</th>
<th>American Truck 99&quot; x 232&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>228cm / 90&quot;</td>
<td>251cm / 99&quot;</td>
</tr>
</tbody>
</table>

**Manual de Colgado / aero series / Rigging Manual**
Here is the second example:
### Accessories

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>eCP_20</strong> (CAT 7 ethernet cable + 3x2.5mm2, audio + data + power, 20m length)</td>
</tr>
<tr>
<td><strong>eCP_3</strong> (CAT 7 ethernet cable + 3x2.5mm2, 3m length)</td>
</tr>
<tr>
<td><strong>eC_09</strong> (CAT 7 ethernet cable; audio + data, 90cm length)</td>
</tr>
</tbody>
</table>

| Plink1_09 (power link 2.5mm2 90cm) | x 18 |

**DASnet-Rack 26 (1 DASnet patch 26 + power distro 32Amp)**

<table>
<thead>
<tr>
<th>Covers</th>
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<tbody>
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<td><strong>FUN-4-AE20</strong> is a protective nylon cover for 4 AERO-20A</td>
</tr>
<tr>
<td><strong>FUN-3-LX218C</strong> nylon cover for a stack of 3 LX-218CA-NET</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Rigging frames</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AX-AE20</strong></td>
</tr>
</tbody>
</table>

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<tr>
<th>Dollies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL-20S</strong> metal transport dolly for 3/4 AERO-20A</td>
</tr>
</tbody>
</table>

| **PL-218CS** dolly is used to transport stacks of 2 or 3 LX-218CA-NET | x 4 |

| **DSP-2060A** | x 2 |

### Dollies

**PL-20S** metal transport dolly for 3/4 AERO-20A

**PL-218CS** dolly is used to transport stacks of 2 or 3 LX-218CA-NET.

### DASnet Splitters

**DASnet-Rack 26 (1 DASnet patch 26 + power distro 32Amp)**

**DSP-2060A**

### Processors (included in the racks)

**AX-AE20**

**Covers**

**FUN-4-AE20** is a protective nylon cover for 4 AERO-20A

**FUN-3-LX218C** nylon cover for a stack of 3 LX-218CA-NET

**Rigging frames**

**AX-AE20**

**Dollies**

**PL-20S** metal transport dolly for 3/4 AERO-20A

**PL-218CS** dolly is used to transport stacks of 2 or 3 LX-218CA-NET.

**DSP-2060A**

### 24 AERO-20A + 12 LX-218CA-NET

**24 AERO-20A**

**American Truck 90" x 232"**

**American Truck 99" x 232"**

**Euro truck 6m Trailer**

**Dolly 6m Trailer**

**243cm / 96"**

**American Truck 90" x 232"**

**American Truck 99" x 232"**

**228cm / 90"**

**251cm / 99"**
ANNEX I: Tools for rigging systems

For best results when hanging aero series 2 systems, it is mandatory the use of Ease Focus 2 simulation software which can be downloaded for free from the support section of our website www.dasaudio.com. The download file contains the software and data files with gll files for acoustic systems.

The user should be aware that any deviation in the actual installation of the system with respect to the simulated data can affect the system’s coverage, especially in the long throw. Therefore DAS can provide clinometers and laser meters to accurately perform the installation of the system:

Leica Disto D5 Laser Meter

Clinometer which is attached to the top cabinet of the array and sensor module. TEQSAS LAP-TEQ
AX-AE20 modular flybar set is comprised of two side panels of steel and aluminum and a central crossbar (PICKUP-AX-AE20).

The maximum load capacity is **20 units** * (pick-up point dependent) with a 5:1 safety factor.

For systems of 12 units or more, an additional bar should be added and the array will hang from two lift motors for greater security and control over the angle of the system at all times.

**AERO-20A** load limitation: * On the side panels the maximum number of units that can be flown are screen printed depending on the pick-up point marked by the software (or vertical axis of the center of gravity of the system). Consulting the **EASE Focus 2** software we will determine the number of units which can be flown from each pick-up point.

These limitations depend on the load of the vertical axis position of the center of gravity of the system:

From points 2 to 20 regardless of whether you use a motor or two, a maximum of 20 **AERO-20A** units can be flown.
- At point 1, 19 units of **AERO-20A** can be flown.
- At point 21, 19 units of **AERO-20A** can be flown.

**Pick-up point - vertical axis of the center of gravity**

In the image at the right you can see the vertical axis of the center of gravity for the system passing through the pick-up point number 11.

The pick-up point shown in the software is placed in alignment with the vertical axis of the center of gravity for the system. The position of this vertical axis obviously depends on the number of boxes, the angle between them and full vertical angle. The loading limitations are displayed by the software and depend on the vertical axis that position the center of gravity.
For example, let’s take a system of 16 **AERO-20A** units. If we consult the panel lettering of the **AX-AE20**, we observe that 16 units can be flown when the vertical axis of the center of gravity is aligned with any of the 21 hanging positions.

In the simulation attached, the system is flown at 10 meters with -6.98° of inclination. No warning of maximum load appears.

The warnings of maximum load appear ONLY if the number of cabinets is greater than 19 units. For more than 19 units, the warnings of load appear and we should check where the vertical axis of the center of gravity for the system is situated.

See what happens if we add four more boxes. Now we have a total of 20 **AERO-20A** units and the software warns us that only 20 units from point 2 at 20 can be flown.

In this case, we have -6.98° of inclination, the vertical axis of the center of gravity of the system is positioned in alignment with the pick-up point number 20. In this case, we are within the safety margins. Remember that from point 2 to point 20, 20 units can be flown (see above panel drawing **AX-AE20**).

20 **AERO-20A** units - As the axis of the vertical center of gravity coincides with the point 20, we can fly 20 units with that configuration.
ANNEX III : Advice for EASE Focus 2 use

It’s important to understand the signs of the system’s total angles in the EASE Focus 2 software program.

A cluster can be flown at different angles, depending on the number of cabinets, the angle between them and the pick-up point. The angle in the software is defined in section View [º].

Inclining systems forwards (downwards) result in a negative angle (-). The systems inclined upwards result in a positive angle (+).

Angle criteria of the cluster - - - -
**Meaning of parameter DELTA EASE Focus 2:**

The *delta* parameter marks the angle **NEEDED** to reach the desired angle in our system (*View [°]*). This information is useful **ONLY** when the system is flown from a single POINT.

Imagine a system of 8 units hanging 11 meters high.

The desired angle is: *View [°]* -15°

As shown in the image, *Delta [°]* -0.69°

This means that to reach the desired -15 °, we are lacking 0.69° when the system is flown at the point 19.

If the delta sign is negative (-), this indicates that we are lacking 0.69 downwards.

If the delta sign is positive (+), this means that we are lacking degrees upwards.

Angular criteria of delta

```
- - - - +
```

Now, we consider the opposite case.

This is the same system hanging from a single point. 8 AERO-20A units.

The desired angle: *View [°]* -12°

In this case *Delta [°]* is 0.53°

This means that if we hang the system from point 18 we lack tilt up 0.53° to reach the desired -12°.
**DELTA parameter in EASE Focus 2 software and maximum angles:**

As seen before the DELTA parameter makes a difference (in excess or in lack of) between the desired angle and the obtained angle to hang the system from a single point.

When we fly the system from TWO points, this parameter is very useful because we also determine the maximum angles with which we can install it.

For example, suppose a set of 16 AERO-20A units:

The system is inclined -7.27°
Vertical axis position of center of gravity is aligned with the pick-up point number 19.

To what **maximum angle** could we tilt down the system?
Suppose we want to hang the system at -15°. Let's see what happens in the software:

Observe how Delta: -8.37°
This means that we lack to reach the desired 8.37°, -17°. In this case the system could only have a maximum tilt: 17-8.37 = 8.63° since no further pick-up points are available on the AX-AE20.

Indeed if we change the angle of the system to -8.63°, we see that the pick-up point (vertical axis of center of gravity) is number 21 and *delta* is zero.