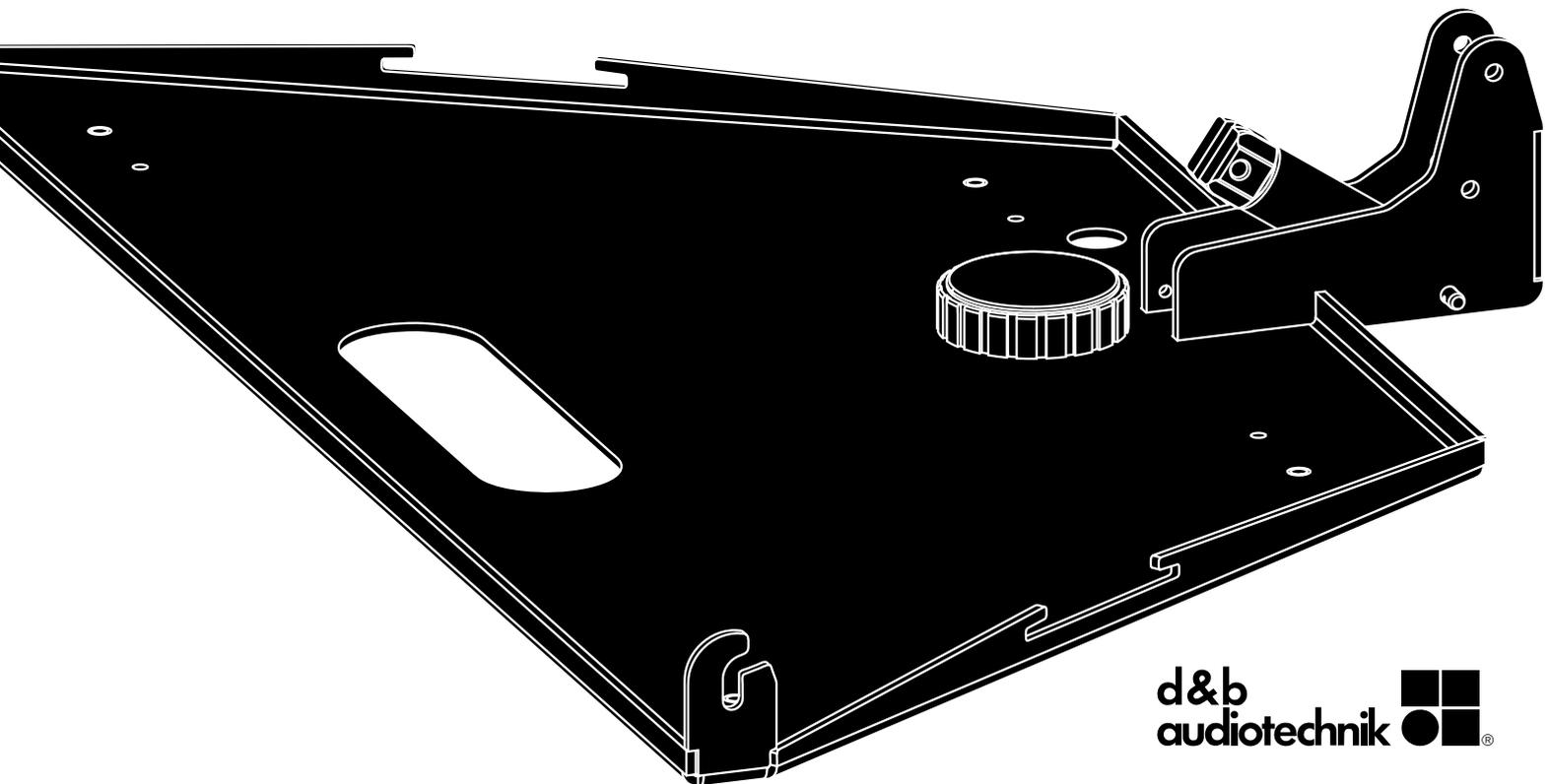




Z5458
Rigging manual 1.1 en



General information

Z5458 Rigging manual

Version: 1.1 en, 04/2020, D2748.EN .01

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Keep this document with the product or in a safe place so that it is available for future reference.

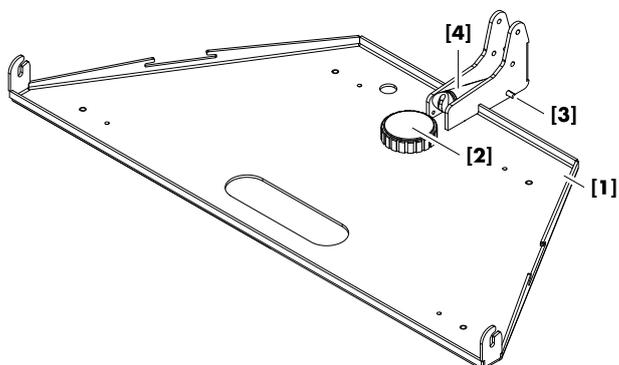
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d&b audiotechnik GmbH & Co. KG
Eugen-Adolff-Str. 134, D-71522 Backnang, Germany
T +49-7191-9669-0, F +49-7191-95 00 00
docadmin@dbaudio.com, www.dbaudio.com

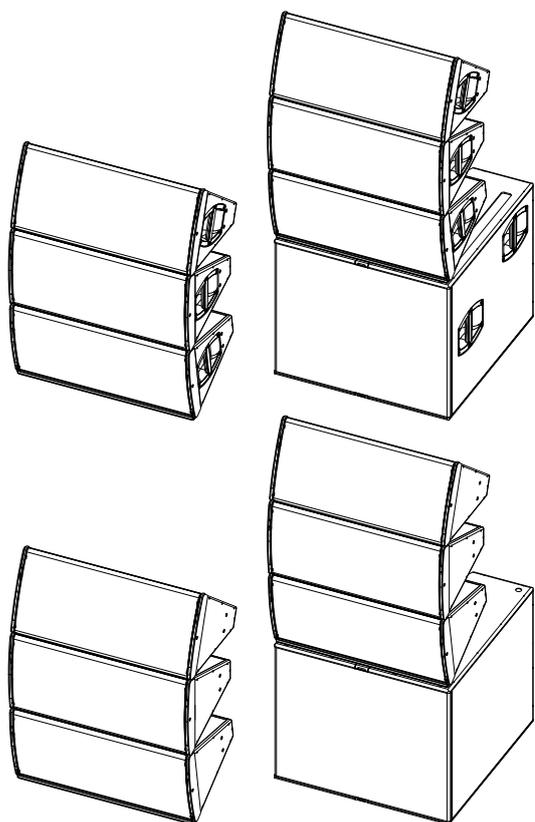
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1.1 Scope of supply

Please verify the shipment for completeness and proper condition of the items.

Qty.	d&b Code	Description
1	Z5458	d&b AL Base plate [1]
Including:		
1		Hand bolt M20 x 25 [2]
1		Locking pin 5 x 35 mm [3]
1		AL Splay link [4]
All items are undetachably attached to the plate using steel wire ropes.		
1	D2748.EN .01	Z5458 Rigging manual



1.2 Intended use

The Z5458 AL Base plate must only be used in conjunction with the d&b A-Series AL60/AL90 and ALi60/ALi90 cabinets, as described in this manual.

1.2.1 General safety

- Installation and setup should only be carried out by qualified and authorized personnel observing the valid national Rules for the Prevention of Accidents (RPA).
- Always carry out a visual and functional inspection of the items before use. In case there is any doubt as to the proper functioning and safety of the items, these must be withdrawn from use immediately.

Please also refer to ⇒ Chapter 4 "Care and maintenance" on page 15.

1.2.2 Load safety information

NOTICE!

The Z5458 AL Base plate is designed to stack a total of 3 x AL60/AL90 or ALi60/ALi90 cabinets either directly on the ground or on top of applicable subwoofer.

2.1 Locking pins

**WARNING!**

Potential risk of personal injury and/or damage to material!

The steel wires of the Locking pins are not intended to carry any load. The cabinet's weight must only be carried by the Front and Splay/Rear links in conjunction with the front and rear rigging strands of the loudspeaker cabinets and the rigging components.

Ensure all Locking pins are fully inserted and securely locked before lifting any load.

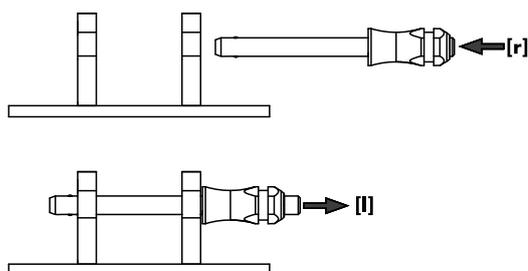
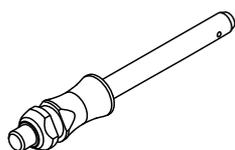
The A-Series loudspeaker cabinets and rigging components are equipped with a Locking pin 5 x 35 mm.

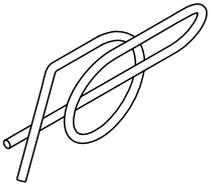
Note: The Locking pins are undetachably attached to the different rigging components on the cabinet using steel wires. Throughout this manual these steel wires are not shown in the corresponding illustrations.

Functionality (Quick lock mechanism)

Proceed as follows:

1. Press the button to **release** the locking mechanism (← [r]).
2. Remove the Locking pin through the respective link or socket.
3. Insert the Locking pin through the respective link or socket until it is fixed in place.
4. Release the button to **lock** the pin (→ [l]).
5. Recheck the Locking pin is securely locked by briefly pulling the Locking pin towards you.

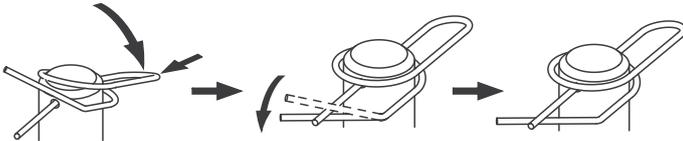
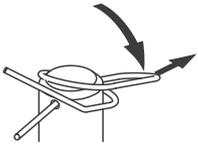
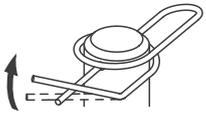




Ring cotter



Ring cotter locked



2.2 Ring cotter

In connection with the A-Series rigging system, ring cotters are used for the following items to prevent the respective item from slackening and/or loosening:

- Fixing bolt of the base plate splay link.
- Fixing bolt of the cabinet's splay link.

Function of the ring cotter

By default, the ring cotters are "locked" to prevent them from loosening.

For modification reasons such as altering the position of the Frame's Rear link or exchanging a shackle, it may be necessary to temporarily remove the ring cotter and reattach it afterwards.

For this purpose proceed as follows:

1. Unlock

Unlock the ring cotter by pushing up the front wire loop over the straight wire shaft.

2. Release and remove

Push down the rear wire loop until the ring cotter snaps over the edge of the bolt and remove the ring cotter.

3. Refit and lock

Refit the ring cotter by pushing the straight wire shaft through the hole and pressing the front wire loop underneath the straight wire shaft.

2.3 Cabinet rigging mechanism

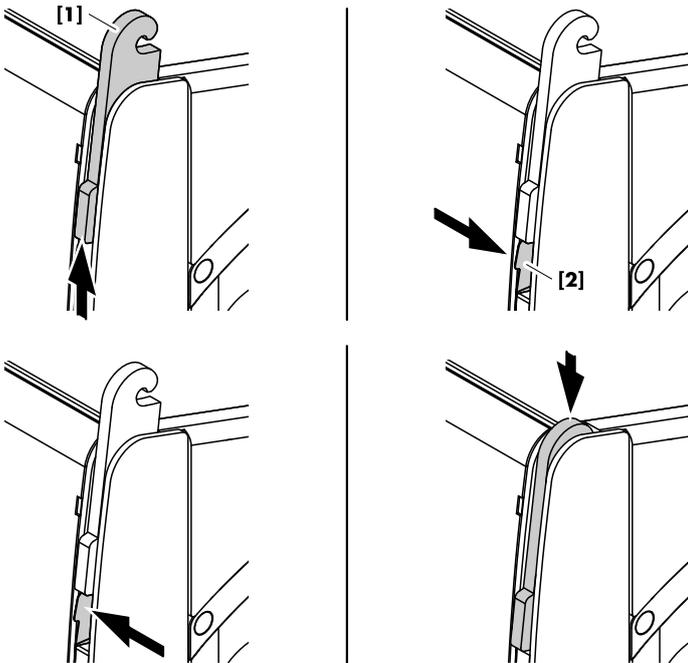
The cabinets are mechanically connected to the Flying frame and subsequent loudspeakers using the Front links on both sides of the cabinet front and the central Splay link on the rear rigging strand of the cabinet.

All necessary rigging components are mounted to the cabinet and slide out or fold out when needed.

2.3.1 Front link mechanism

To extend and/or park the Front link, proceed as follows:

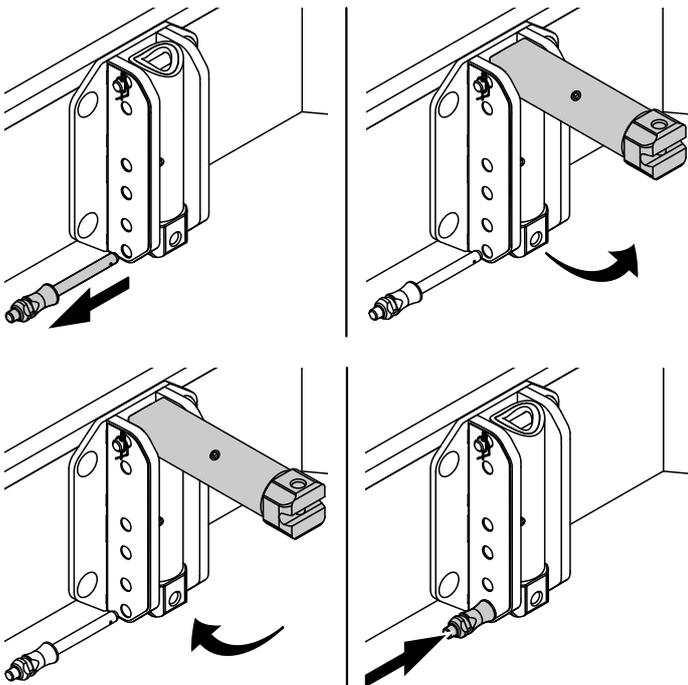
1. Slide out the Front link **[1]** up to its stop position.
 - ↳ Once the Front link is fully extended, it will be automatically fixed in place by the spring steel sheet **[2]**.
2. To slide the Front link back into its park position, press the spring steel sheet towards the front grill.
3. Slide the Front link back into its park position.

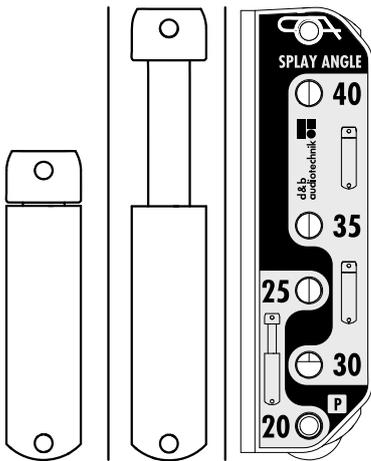


2.3.2 Splay link mechanism

The Splay link is fixed in its park position (P) by a Locking pin.

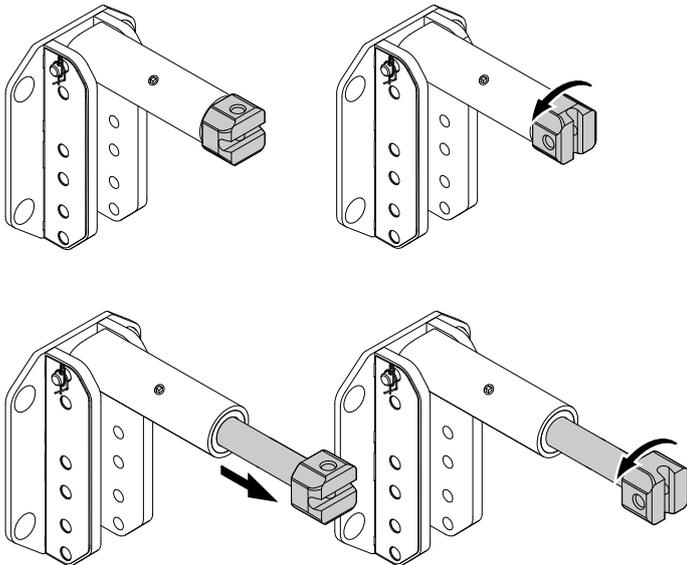
1. Release the Locking pin and fold out the Splay link.
2. To park the Splay link, proceed in reverse order and ensure the extension tube is fully pushed in and the head is aligned correspondingly, as shown in the graphic opposite.





Standard | Extended | Hole grid

Splay link lengths and correlation to the hole grid on the rear rigging strand.



2.3.3 Setting the splay angle(s)

Splay angles between adjacent cabinets can be set in the range from 20° to 40° in 5° increments resulting in a total coverage of 50° up to 70° for two cabinets, with a maximum total coverage of 150° for four cabinets.

Splay angles can also be set symmetrically or asymmetrically, depending on the application.

For this purpose, the Splay link provides two different lengths: **Standard** or **Extended**.

Together with the corresponding **Hole grid** on the rear rigging strand, the desired splay angles can be set in the range from 20° to 40° in 5° increments.

The Splay link is constructed as a cylindrical extender (we call it the 'Trombone');. The extension tube head can be turned counter clockwise by 90° and back again.

To change between the Standard and Extended positions, proceed as follows:

Standard length

1. Fold out the Splay link as previously described.
2. Turn the extension tube head counter clockwise by 90° to fix the standard length of the Splay link.

Extended length

1. Fold out the Splay link as previously described.
2. Pull out the extension tube to its stop position.
3. Turn the extension tube head counter clockwise by 90° to fix the extended length of the Splay link.

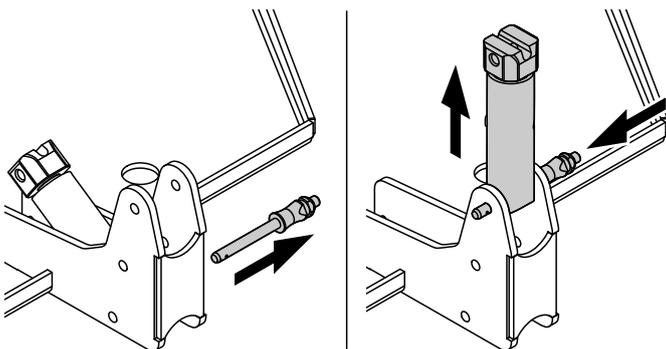
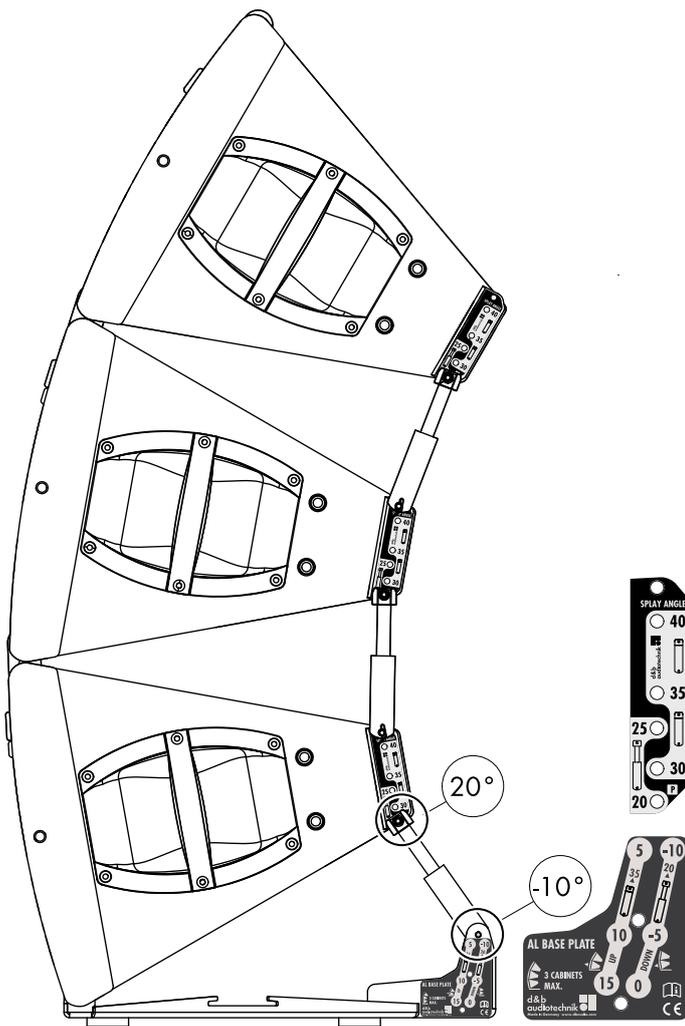
2.3.4 Splay link of the Base plate

The rear rigging slot of the Base plate is also equipped with a Splay link. Depending on its position in the hole grid of the rigging slot and on its set length (Standard or Extended), the Splay link allows either an uptilt or a downtilt of the first cabinet.

Up In combination with the 35° hole on the rear rigging strand of the first cabinet and with the Splay link set to 'Standard' length, the rigging slot of the Base plate allows for uptilt angles of 5° (upper hole), 10° (center hole) and 15° (bottom hole).

Down In combination with the 20° hole on the rear rigging strand of the first cabinet and with the Splay link set to 'Extended' length, the rigging slot of the Base plate allows for downtilt angles of -10° (upper hole), -5° (center hole) and 00° (bottom hole), shown as an example in the graphic opposite.

The splay angle(s) of the next (two) cabinet(s) is/are set in the same manner as described in the previous sections.



Changing the Splay link position

To easily change the position of the Splay link of the Base plate, it is fixed using the corresponding Locking pin.

To change the position of the Splay link, proceed as follows:

1. Release the Locking pin.
2. Move the Splay link to the desired hole position in the rigging slot.
3. Insert the Locking pin and ensure the pin is fully inserted and properly locked.

**WARNING!**

Potential risk of personal injury and/or damage to material!

Always secure ground stacked setups against movement and possible tipping over.

Observe the maximum number of cabinets permitted. This is particularly important when setting up mixed ground stacks.

3.1 Preparing the setup

General

Check the acoustical and mechanical setup using ArrayCalc.

When on site first:

- Clear the working areas and ensure there is enough space to set up the ground stack.
- Prepare the cables and link cables according to the number of amplifier channels and cabinets used.

Inspections before setup

Before setting up the ground stack, carry out a visual inspection of all system components for faults. This also includes the loudspeakers and in particular the rigging parts of the cabinets (Front and Splay/Rear links).

Damaged components must be withdrawn from use immediately.

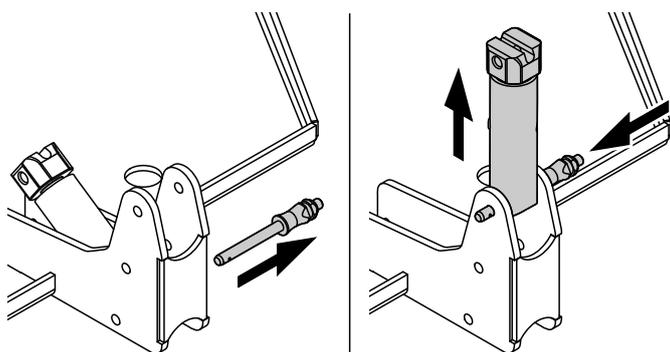
Please also follow the instructions given in ⇒ Chapter 4 "Care and maintenance" on page 15.

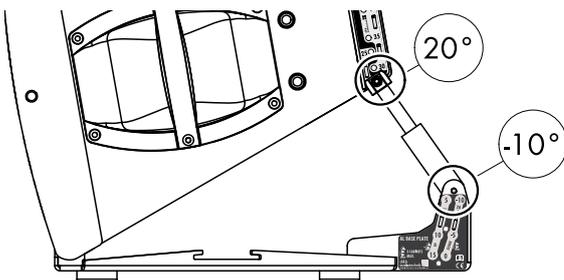
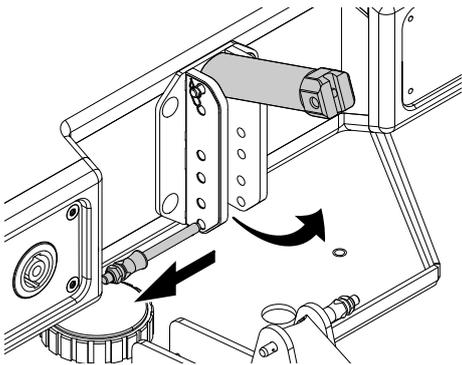
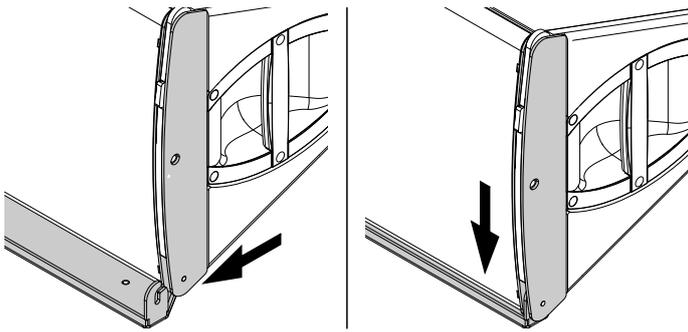
3.2 Order of assembly

3.2.1 AL ground stack

1. Prepare the Base plate

1. Fix the Splay link of the Base plate in the required hole position.
2. Position the Base plate on the ground.





Aiming of the first cabinet

Shown: -10° down tilt

2. Attach the first cabinet to the Base plate

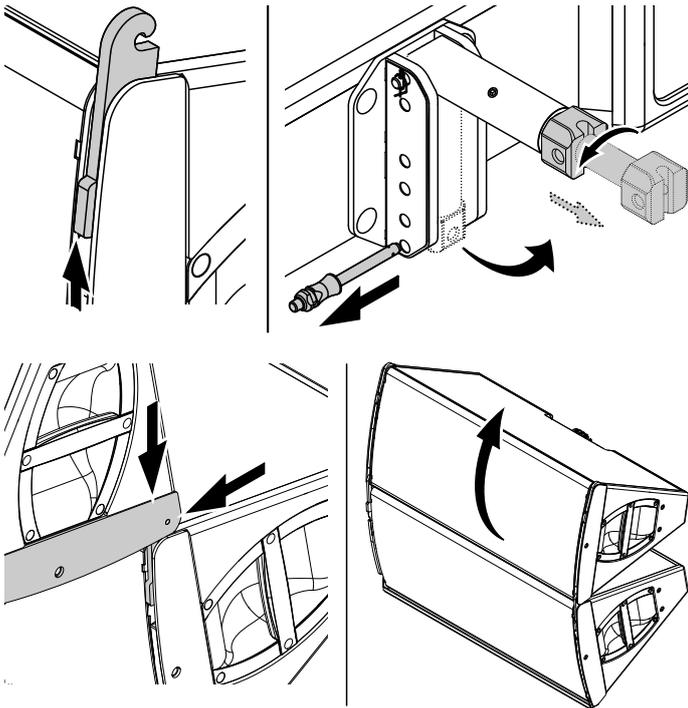
1. Place the first cabinet onto the Base plate until the cabinet's slots fit into the corresponding fixtures of the Base plate.
2. Slightly lower the cabinet until the cabinet's slots have engaged into the corresponding fixtures of the Base plate.

3. At the rear, release the Locking pin of the Splay link.
4. Fold out the Splay link.

3. Set vertical aiming of the first cabinet

The aiming of the first cabinet can be set to various angles for an up-tilt or down-tilt as described in ⇒ Chapter 2.3.4 "Splay link of the Base plate" on page 9.

1. Set the link to the required length ('Standard' for up-tilt or 'Extended' for down-tilt) and turn the extension tube head counter clockwise by 90°.
2. Insert the Splay link of the Base plate into the rear rigging strand of the cabinet and align the hole of the link with the relevant hole on the strand for up-tilt (35° hole) or down-tilt (20° hole).
3. Insert the Locking pin of the cabinet and ensure the pin is fully inserted and properly locked.



4. Add further cabinets

1. Extend the Front links of the first cabinet.
2. At the rear of the second cabinet, release the Locking pin of the Splay link.
3. Fold out the Splay link.
4. Set the link to the required length (Standard or Extended) and turn the extension tube head counter clockwise by 90°.
5. Align the Front links of the second cabinet with the corresponding slots of the first cabinet, as shown in the graphic opposite.
6. Insert the Front links into the slots and slightly pull the second cabinet to the front until the links have engaged.
7. Fold the cabinet towards the back.

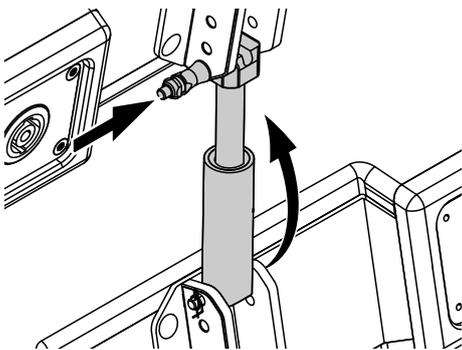
5. Set the splay angle

The splay angles between adjacent cabinets are set on the central rear rigging strands of the cabinets and can be set in the range from 20° to 40° in 5° increments.

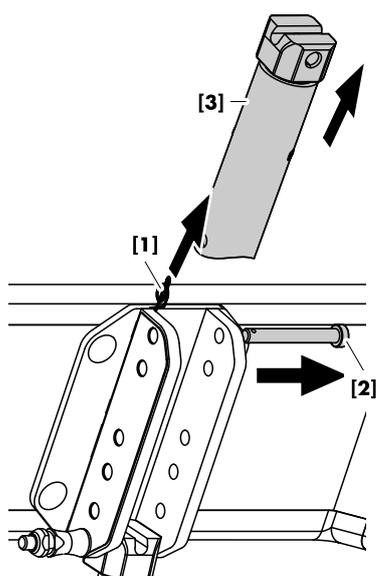
Select the splay angles according to your ArrayCalc simulation.

Depending on the desired splay angle, set the extension tube to the "Standard" or the "Extended" length as described in ⇒ Chapter 2.3.3 "Setting the splay angle(s)" on page 8.

1. Align the Splay link of the first cabinet with the corresponding hole for the desired splay angle on the rear rigging strand of the second cabinet.
2. Insert the respective Locking pin and ensure the pin is fully inserted and properly locked.



To add a third cabinet, proceed in the same manner until the assembly is completed.



7. Splay link of the last cabinet

To avoid either rattling during operation or damage to the Splay link of the last cabinet, we recommend you to remove the Splay link and store it temporarily in a safe place. To remove the Splay link, proceed as follows:

1. Release and remove the ring cotter **[1]** of the fixing bolt.
2. Remove the fixing bolt **[2]** and the Splay link **[3]**.

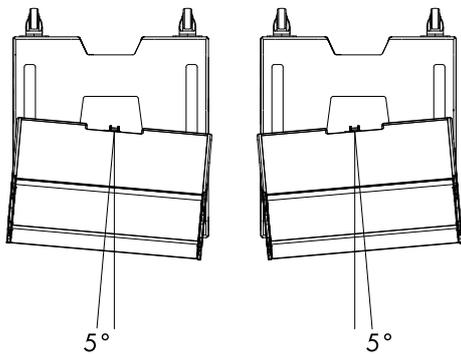
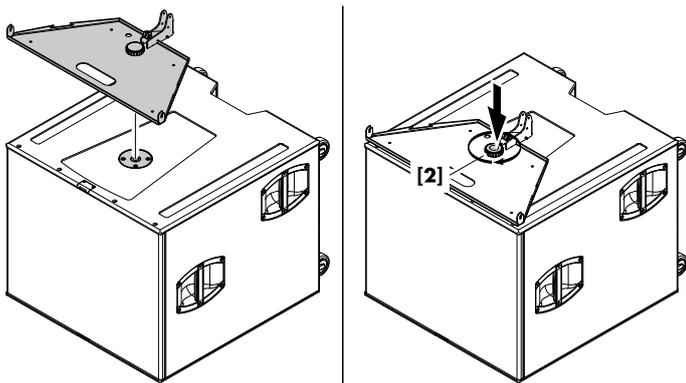
8. Rig the cabling

Connect the flying cables and link cables according to the number of amplifier channels and cabinets used. Observe the related loudspeaker setups for the inner (In) and outer (Out) cabinets.

9. Check the assembly

Recheck the actual status of the entire assembly.

- Check all Front links on both sides of the cabinets.
- Check the splay angle settings and the Splay links at the rear of the cabinets and ensure all Locking pins are properly inserted and locked.



3.2.2 Mixed ground stack

To set up a mixed ground stack, the Base plate is equipped with an M20 hand bolt [2], which can be attached to the M20 threaded insert of the respective subwoofer.

⇒ Simply fit the Base plate onto the M20 threaded insert of the subwoofer and tighten the hand bolt.

The assembly of the A-Series cabinets on top of the subwoofer is carried out in the same manner as described in the previous chapter.

Horizontal alignment

In addition, the assembly on top of the subwoofer can be horizontally aligned to the left or to the right. However, due to the rubber feet of the Base plate, the angle is limited to 5° since the front rubber feet should always rest on the top panel of the subwoofer.

⇒ To perform the alignment, slightly slacken the hand bolt, align the assembly and retighten the hand bolt.

3.3 Derigging

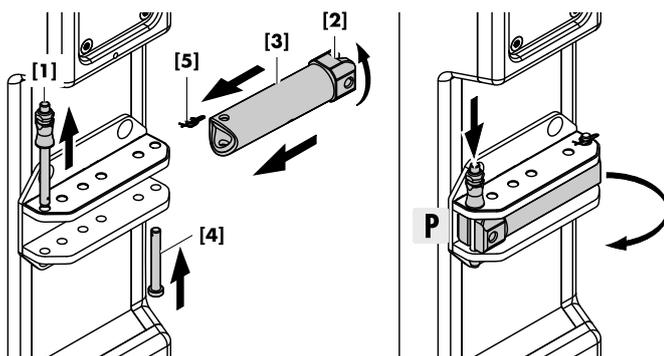
The same safety instructions apply!

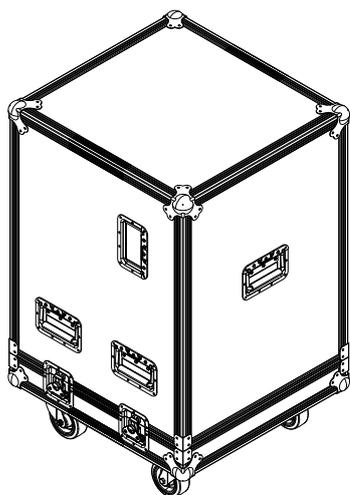
To dismantle any of the assemblies, follow the corresponding rigging and setup instructions in reverse order.

Refit the Splay link

During setup, the Splay link of the last cabinet has been removed and must be refitted to the cabinet. For this purpose, proceed as follows:

1. Release the Locking pin [1].
2. Turn the extension tube head [2] by 90°.
3. Insert the Splay link into the rigging strand [3].
4. Refit the fixing bolt [4].
5. Refit and lock the ring cotter [5].
6. Fold the Splay link back into its park position [⇒ P] and reinsert the Locking pin.





E7927 Touring case 2 x AL

4.1 Transport/storing

During transport ensure the rigging components are not stressed or damaged by mechanical forces. Use suitable transport cases.

We recommend the use of the d&b E7927 Touring case 2 x AL for this purpose. The touring case provides specific trays and fixtures for the AL Flying frame and AL Flying adapter.

Due to their surface treatment the rigging components are temporarily protected against moisture. However, ensure the components are in a dry state while stored or during transport.

4.2 Visual and functional inspection



WARNING!

Potential risk of personal injury and/or damage to material

To eliminate the potential risk of accident due to malfunctioning of a component, regularly inspect all system components.

Cabinet enclosure

- Visual inspection of all fitting plates for obvious damage (e.g. cracks or corrosion).
- Visual inspection of the rear rigging strand for obvious damage (e.g. cracks, deformation or corrosion) including all drilled holes of the component.
- Inspection of all fitting plates including front grills to ensure they are securely attached.
- Regularly lubricate the sockets using WD-40® or a similar product.

Front and Splay links

Visual inspection regarding deformation and damage (e.g. cracks and corrosion) including all drilled holes of the component.

Locking pins

- Visual inspection for deformation, cracks and corrosion of the component.
- Inspection for missing ball bearings and damage.
- Functional inspection of the release mechanism to ensure it operates properly.
- Regularly lubricate the Locking pins using WD-40® or a similar product.

Z5458 AL Base plate

Visual inspection regarding deformation and damage (e.g. cracks and corrosion) including all drilled holes of the component.



5.1 EU conformity (CE symbol)

This declaration applies to:

d&b Z5458 AL Base plate

manufactured by d&b audiotechnik GmbH & Co. KG.

All product variants are included, provided they correspond to the original technical version and have not been subject to any later design or electromechanical modifications.

We herewith declare that said products are in conformity with the provisions of the respective EC directives including all applicable amendments.

A detailed declaration is available on request and can be ordered from d&b or downloaded from the d&b website at www.dbaudio.com.

5.2 Disposal

When out of use the rigging components must be disposed of in accordance with the national environmental regulations.

Ensure that damaged rigging components are disposed of in a way that they cannot be used again.

