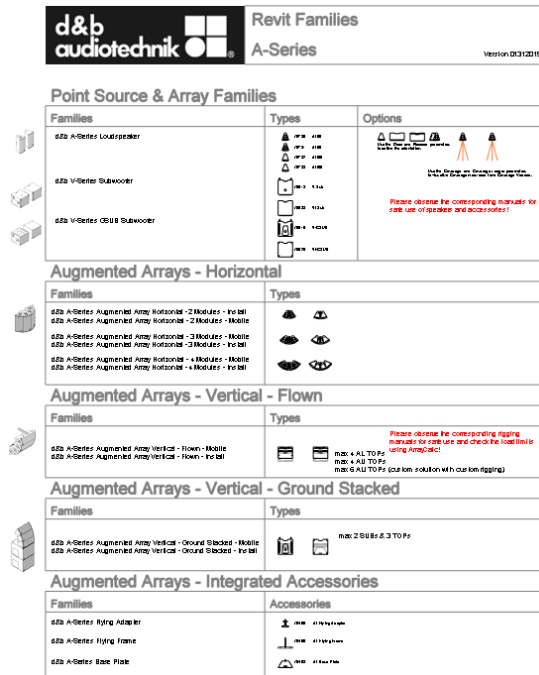


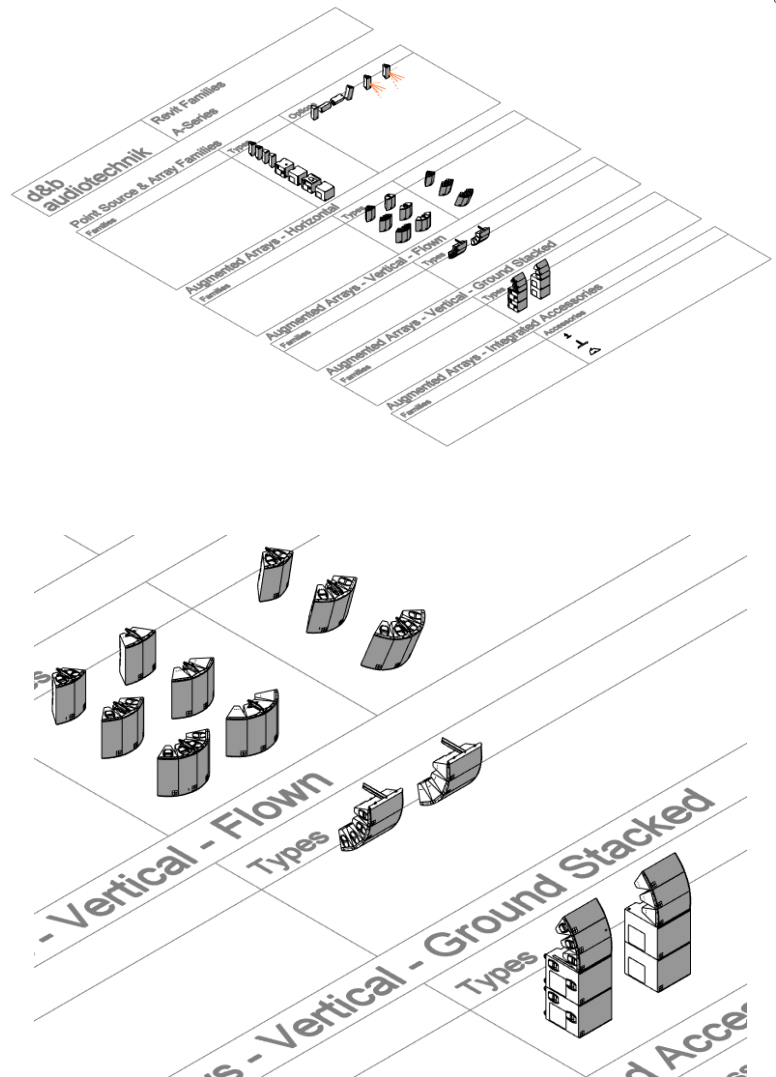
d&b audiotechnik Revit Families A-Series README

1. Overview

The d&b Revit families are based on Revit version 2016 and are created as Communication Device families. All families are composed at a glance in the project d&b audiotechnik Revit Families A-Series.rvt. It contains all components of the A-series. Basically, the families are split into loudspeaker families, subwoofer families, horizontal and vertical augmented array families and accessories families. Accessories are already integrated as nested families in the array families and can be scheduled accordingly.



d&b audiotechnik Revit Families A-Series.rvt
Plan View



d&b audiotechnik Revit Families A-Series.rvt
Isometric Views

2. How to add d&b families into your project

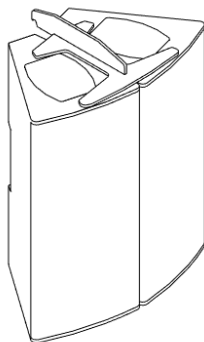
1. Open your project.
2. Open the *d&b audiotechnik Revit Families A-Series.rvt*
3. In this project, select a family.
4. In the *Modify* menu run *Edit Family*.
This opens the Family Editor.
5. From here, run *Load into Project* (or *Load into Project and Close*) and select your project.
The family is available now in the project browser of your project under *Families > Communication Devices*. The family types can be dragged into your drawing area.
The nested families are also automatically loaded into your project and show up in the project browser.
6. You can close the family you have opened. You do not need to save it, as all families and types are still available in the *d&b audiotechnik Revit Families.rvt*.

Notes:

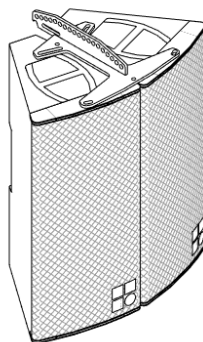
We do not recommend to run "Copy and Paste" from project to project, as this will copy only the selected type into your project. You may miss additional types in a later phase.

3. Detail Levels

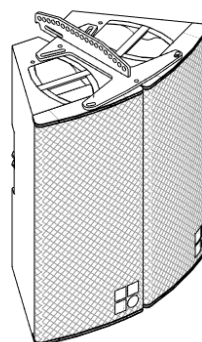
The d&b audiotechnik families support the Detail Levels Coarse, Medium and Fine.



Coarse



Medium



Fine

4. Materials

d&b audiotechnik Materials are already set in the *Properties* of the families. The materials are already predefined for visualization in Revit.

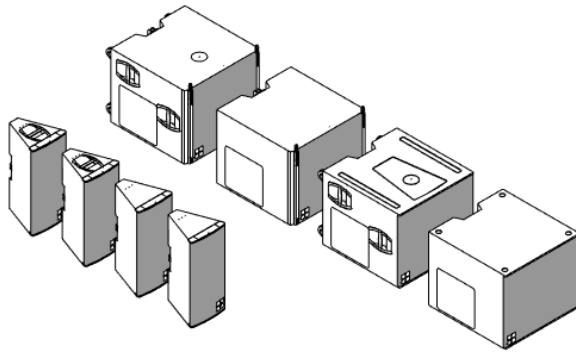
Refer to website or manual to check if Special Colour versions are available. d&b colours the products according to the RAL table. Parts that will be painted are the cabinet, grill and front rigging (d&b Metal Black). The *d&b always black* Material is used for parts of the components, which you cannot order in a different color.

The V-series is using standard Revit materials. In case you want to create custom materials, duplicate the materials and material assets for enclosure, grill and paint, and assign it to the properties of a speaker or subwoofer. You can use the "Tint" option in the Appearance tab of the Materials dialog to define custom colours.

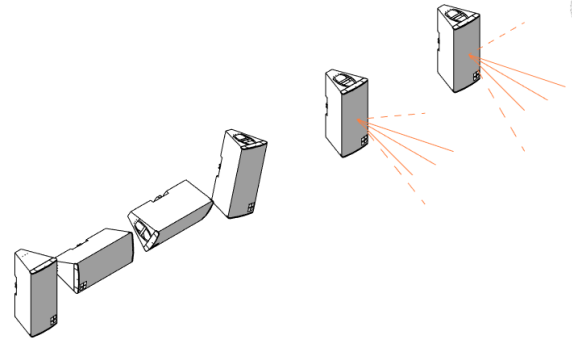
Materials and Finishes	
Enclosure Material	d&b Paint Black
Grill Material	d&b Metal Grill Black
Metal Material	d&b Metal Black

5. Point Source Families

These families are usually placed on a level. *Pitch* & *Rotation* parameters allow you to rotate them according to the installation. Use the *Offset* parameter in the *Properties* to set the component on a specific height. Coverage lines and rotated horn can be shown. The speaker family contain mobile and installation variants.



TOPs & SUBs



Samples with different Pitch and Rotation values and enabled Coverage Lines

6. Point source families properties

Properties	
d&b A-Series Loudspeaker ALi90	
Communication Devices (1) Edit Type	
Constraints	
Pitch	0.000°
Rotation	0.000°
Offset	350.0 mm
Work Plane	Level : Level 1
Graphics	
Coverage	<input type="checkbox"/>
Coverage Length	500.0 mm
Logo	<input checked="" type="checkbox"/>
Materials and Finish...	
Enclosure Material	d&b Paint Black
Grill Material	d&b Metal Grill B...
Logo Material	d&b Metal Logo ...
Metal Material	d&b Metal Black
Electrical - Loads	
Identity Data	
Image	
Comments	
Mark	4

Constraints

Pitch and *Rotation* defines the rotation of the speaker in 2 axis.

Graphics

Shows the coverage lines and the length of the Coverage lines.

Further the d&b Logo can be deactivated. If you select *Rotated Horn* under the *Construction* headline, Coverage lines will be rotated as well.

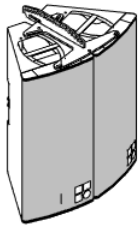
Materials

Assignment of d&b materials for the different components of the families.

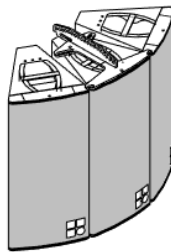
For custom materials, note the chapter 4. Materials

8. Augmented Array Families - Horizontal

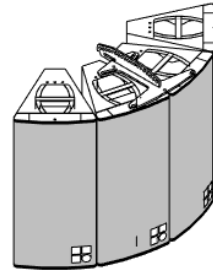
Instead of combining single speakers or subs manually to a line array in a Revit project (which is likely a cumbersome task), we have developed predefined array families. They consist of nested families such as the flying adapter. As they are nested families, they show up in the schedules. Various property settings allow to set up the line arrays. There are separate array families for mobile and installation. In general, we differ between the following augmented horizontal arrays:



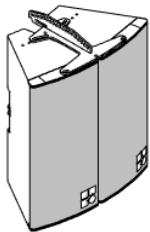
Augmented Array – Horizontal
2 Modules - Mobile



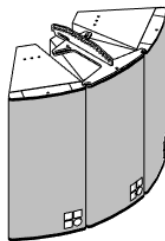
Augmented Array – Horizontal
3 Modules - Mobile



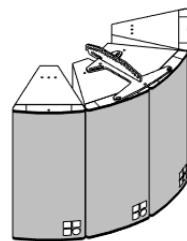
Augmented Array – Horizontal
4 Modules - Mobile



Augmented Array – Horizontal
2 Modules - Install



Augmented Array – Horizontal
3 Modules - Install



Augmented Array – Horizontal
4 Modules - Install

9. Properties Augmented Array Families - Horizontal

Properties

d&b A-Series Augmented Array Horizontal - 4 Modules - Mobile
Augmented Array Horizontal - 4 Modules - Mobile

Communication Devices (1) ☐ Edit Type

Pitch -20.000°

Level Level 1

Host Level : Level 1

Offset 350.0 mm

Moves With Nearby EL... ☐

Construction

Flying Adapter ☒

1 Loudspeaker <Data ... AL60

2 Loudspeaker <Data ... AL60

3 Loudspeaker <Data ... AL60

4 Loudspeaker <Data ... AL60

Graphics

Coverage ☐

Coverage Length 500.0 mm

Logo ☒

Materials and Finishes

Enclosure Material d&b Paint Black

Grill Material d&b Metal Grill Black

Logo Material d&b Metal Logo Black

Metal Material d&b Metal Black

Electrical - Loads

Dimensions

Splay Angle 2 30.000°

Splay Angle 3 30.000°

Splay Angle 4 30.000°

Pitch

Defines the Pitch value for the array.

Construction

Checkbox to display the Flying Adapter

1 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
2 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
3 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]

Defines the use AL60/AL90 or ALi60/ALi90 speakers, the prefix number stands for the position, measured from left to right.

Graphics

Shows the coverage lines and the length of the Coverage lines.

Further the d&b Logo can be deactivated.

Materials

Assignment of d&b materials for the different components of the families.

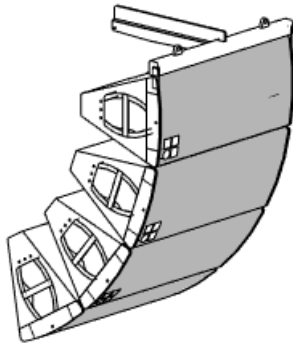
Dimensions

Here you set the angles between the TOPs. Make sure that you set the values according the d&b audio installation manuals, as Revit would allow any values!
AL60/ALi60 or AL90/ALi90: **20°;25°;30°;35°;40°**

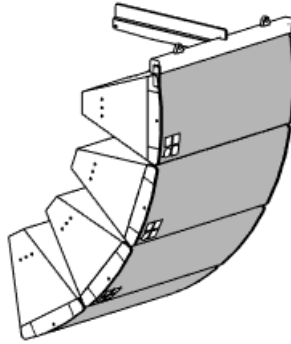
Please observe the corresponding rigging manuals for safe use and check the load limits using ArrayCalc!

10. Augmented Array Families – Vertical – Flown

In general, we differ between the following augmented flown arrays:



Augmented Array Vertical- Flown
Mobile



Augmented Array Vertical- Flown
Install

11. Properties Augmented Array Families – Vertical – Flown

Properties

d&b A-Series Augmented Array Vertical - Flown - Mobile
A-Series Augmented Array Vertical - Flown - Mobile

Communication Devices (1) Edit Type

Moves With Nearb... ☐

Construction

Number of Louds... 4

1 Loudspeaker<D... AL60

2 Loudspeaker<D... AL60

3 Loudspeaker<D... AL60

4 Loudspeaker<D... AL60

Graphics

Coverage ☐

Coverage Length 500.0 mm

Logo ☒

Materials and Finish...

Enclosure Material d&b Paint Black

Grill Material d&b Metal Grill B...

Logo Material d&b Metal Logo ...

Metal Material d&b Metal Black

Electrical - Loads

Dimensions

Frame Angle 0.000°

Splay Angle 1 0.000°

Splay Angle 2 20.000°

Splay Angle 3 20.000°

Splay Angle 4 20.000°

Identity Data

Image

Construction

Number of Loudspeakers

Allows to display max 4 TOPs,

max 6 ALi TOPs with custom solution with custom rigging

1 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
2 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
3 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]

Defines the use AL60/AL90 or ALi60/ALi90 speakers, the prefix number stands for the position, measured from top to bottom.

Graphics

Shows the coverage lines and the length of the Coverage lines.

Further the d&b Logo can be deactivated.

Materials

Assignment of d&b materials for the different components of the families.

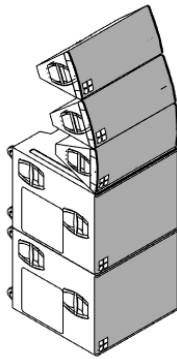
Dimensions

Here you set the angles between the TOPs. Make sure that you set the values according the d&b audio installation manuals, as Revit would allow any values! AL60/ALi60 or AL90/ALi90: **20°;25°;30°;35°;40°**

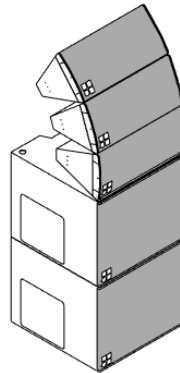
Please observe the corresponding rigging manuals for safe use and check the load limits using ArrayCalc!

12. Augmented Array Families – Vertical – Ground Stacked

In general, we differ between the following augmented ground stacked arrays:

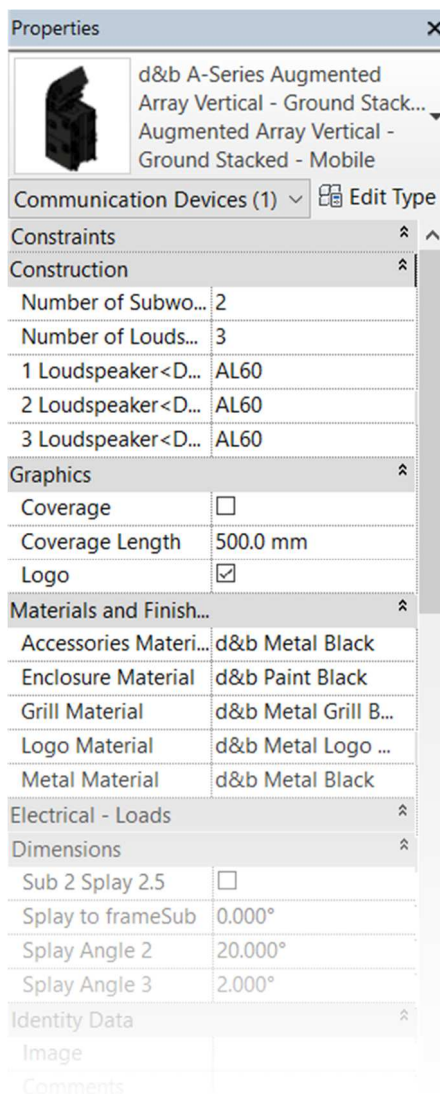


Augmented Array -Vertical - Ground Stacked
Mobile



Augmented Array -Vertical - Ground Stacked
Install

13. Properties Augmented Array Families – Vertical – Ground Stacked



Construction

Number of Subwoofers/Loudspeakers
Allows to display max 2 SUBs and 3 TOPs,

1 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
2 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]
3 Loudspeaker	[AL60 or AL90]	[Ali60 or Ali90]

Defines the use AL60/AL90 or Ali60/Ali90 speakers, the prefix number stands for the position, measured from bottom to bottom.

Graphics

Shows the coverage lines and the length of the Coverage lines.
Further the d&b Logo can be deactivated.

Materials

Assignment of d&b materials for the different components of the families.

Dimensions

Here you set the angles between the TOPs. Make sure that you set the values according the d&b audio installation manuals, as Revit would allow any values!

AL60/Ali60 or AL90/Ali90: **20°;25°;30°;35°;40°**

Please observe the corresponding rigging manuals for safe use and check the load limits using ArrayCalc!

14. Type properties

Additional data is integrated in the type properties of the families and can be schedules, such as *Part Number* and the properties under the *Data* group.

Type Properties

Family: d&b A-Series Loudspeaker Load...

Type: ALI90 Duplicate... Rename...

Type Parameters

Parameter	Value
Constraints	
Default Elevation	1219.2 mm
Construction	
Handle	<input type="checkbox"/>
Dimensions	
Height	700.0 mm
Width	322.0 mm
Depth	356.0 mm
Identity Data	
Part Number	Z0733
Support Email	support@dbaudio.com
Support Phone	+49 7191 9669-0
Type Image	
Keynote	
Model	ALI90 loudspeaker
Manufacturer	d&b audiotechnik GmbH
URL	www.dbaudio.com
Type Comments	
Description	installation specific 2-way passive High pe
Assembly Code	
Cost	
Assembly Description	
Type Mark	
OmniClass Number	23.85.10.11.14.14
OmniClass Title	Loudspeakers
Code Name	
Data	
Frequency Range Low (-5 dB Standard)	60.00 Hz
Frequency Range High (-5 dB Standard)	18000.00 Hz
Max. SPL (1m, Free Field) with D6/10D	0
Max. SPL (1m, Free Field) with D20/30D	138
Max. SPL (1m, Free Field) with D80	139
SPL Max	139
SPL Stimulus	SPL max peak test signal: pink noise with cr
Cabinets per Amplifier Channel	2
Power Handling Capacity Peak 10 ms	1800.00 W
Power Handling Capacity RMS	400.00 W
Coverage Horizontal	30.000°
Coverage Vertical	90.000°
Weight	22.000 kg
LF Diameter	10 Inch
LF Quantity	2
HF Diameter	3 Inch
HF Quantity	1
HF Exit	1.4 inch
Connections	Phoenix socket (Type: DFK PC 4/4 GF)
Cabinet Materials	Marine Plywood
Cost MSRP	0.00
Cost Project	0.00

<< Preview OK Cancel Apply

d&b audiotechnik Revit Families A-Series README

15. Schedules


Note:

The *Communication Device* Schedule in *d&b audiotechnik Revit Families.rvt*. It counts the components including their data.

A	B	C	D	E	
Family	Type	Manufacturer	Model	Part Number	
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	ALi90	d&b audiotechnik GmbH	ALi90 loudspeaker	Z0733	installation specific 2-
d&b A-Series Loudspeaker	AL90	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0731	2-way passive High p
d&b V-Series Subwoofer	V Sub	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flya
d&b A-Series Flying Frame	AL Flying Frame	d&b audiotechnik GmbH	A-Series Flying Adapte	Z5455	A-Series Flying Fram
d&b A-Series Flying Adapter	AL Flying Adapter	d&b audiotechnik GmbH	AL Flying Adapter	Z5456	Flying adapter for hori
d&b A-Series Augmented Array Horizontal - 4 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Horizontal augmented a		
d&b A-Series Augmented Array Vertical - Flown -	A-Series Augmented Arra	d&b audiotechnik GmbH	Installation specific flow		
d&b A-Series Flying Frame	AL Flying Frame	d&b audiotechnik GmbH	A-Series Flying Adapte	Z5455	A-Series Flying Fram
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Augmented Array Horizontal - 3 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Horizontal augmented a		
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Augmented Array Horizontal - 3 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Installation specific hori		
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Augmented Array Horizontal - 2 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Horizontal augmented a		
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Loudspeaker	AL60	d&b audiotechnik GmbH	AL60 Loudspeaker	Z0730	2-way passive High p
d&b A-Series Augmented Array Horizontal - 2 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Installation specific hori		
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Augmented Array Horizontal - 4 Mo	Augmented Array Horizon	d&b audiotechnik GmbH	Installation specific hori		
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Loudspeaker	ALi60	d&b audiotechnik GmbH	ALi60 loudspeaker	Z0732	Installation specific 2-
d&b A-Series Flying Adapter	AL Flying Adapter	d&b audiotechnik GmbH	AL Flying Adapter	Z5456	Flying adapter for hori

16. Tags

You can use the integrated d&b annotation tag to automatically annotate the types with part number or Type name.

	Z0730	AL60
	Z0731	AL90
	Z0732	ALi60
	Z0733	ALi90