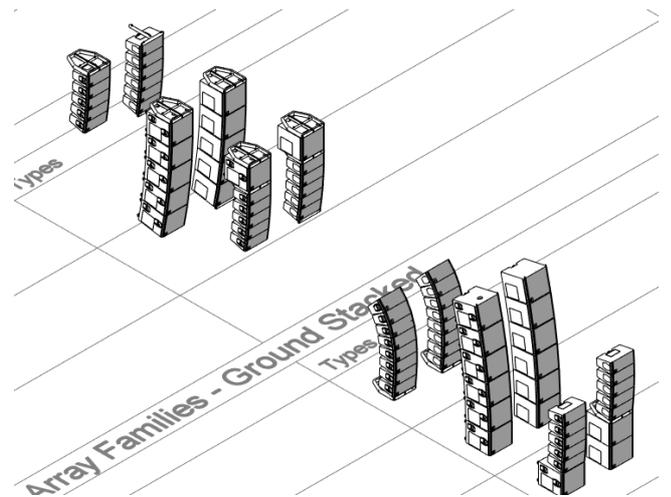
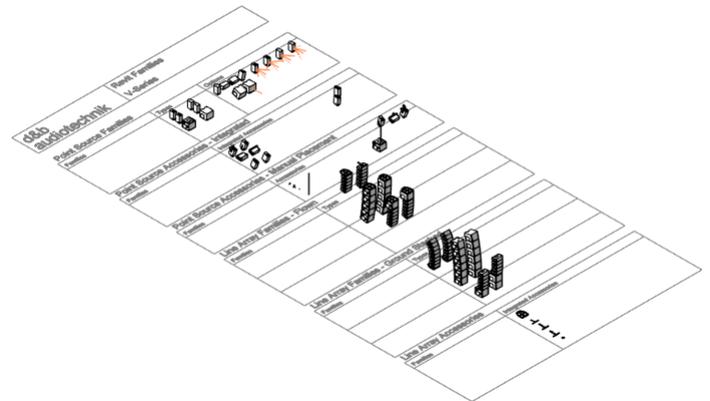


d&b audiotechnik Revit Families V-Series README

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 V-Series.rvt*. It contains all components of the V-series. Basically, the families are split into point source families, cluster bracket array families, line array families and accessories families. Where applicable, accessories are already integrated as nested families in the speaker and subwoofer families and can be scheduled accordingly.

d&b audiotechnik Revit Families V-Series		Version: 2-3-2018
Point Source Families		
Families	Types	Options
<ul style="list-style-type: none"> d&b 90cm PAH 2 way d&b 90cm UN 2-broad 		<p>Please observe the mounting options for safe use of systems, see accessories!</p>
Point Source Accessories - Integrated		
Families	Integrated Accessories	
<ul style="list-style-type: none"> d&b 90cm Mounting Bracket d&b 90cm Mounting Bracket d&b 90cm HF Hying duplex 		
Point Source Accessories - Manual Placement		
Families	Accessories	
<ul style="list-style-type: none"> d&b 120 pad d&b 90cm C-clip d&b Hying P-1 Transducer 21cm 		
Line Array Families - Flown		
Families	Types	
<ul style="list-style-type: none"> d&b 90cm Horn 1 way - 1 m package d&b 90cm Horn 1 way - 1 m package d&b 90cm Horn 2 way - 2.5 m d&b 90cm Horn 2 way - 2.5 m d&b 90cm Horn 4 way - 3.5 x 2.5 m package d&b 90cm Horn 4 way - 3.5 x 2.5 m package 	<p>Please observe the mounting, height, weights for safe use with d&b Point Source, using d&b Cat!</p>	
Line Array Families - Ground Stacked		
Families	Types	
<ul style="list-style-type: none"> d&b 90cm Dura 21cm 4 way - 1 m package d&b 90cm Dura 21cm 4 way - 1 m package d&b 90cm Dura 21cm 4 way - 2.5 m d&b 90cm Dura 21cm 4 way - 2.5 m d&b 90cm Dura 21cm 4 way - 3.5 x 2.5 m package d&b 90cm Dura 21cm 4 way - 3.5 x 2.5 m package 		
Line Array Accessories		
Families	Integrated Accessories	
<ul style="list-style-type: none"> d&b 90cm Hying frame d&b 90cm Hying duplex d&b 90cm Mounting frame 1 way d&b 90cm Mounting frame 2 way d&b 90cm 21cm duplex 		



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

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

d&b audiotechnik Revit Families V-Series README

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

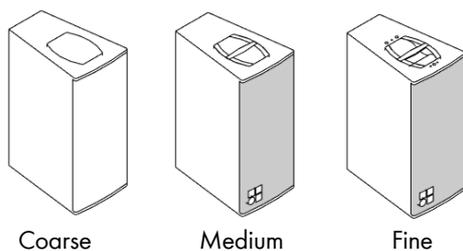
1. Open your project.
2. Open the *d&b audiotechnik Revit Families V-Series.rvt*
3. In this project, select a family.
4. In the *Modify* menu run *Edit Family*.
This opens the Family Editor.
5. From here, run *Load into Project* (or *Load into Project and Close*) and select your project.
The family is 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.



4. Materials

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

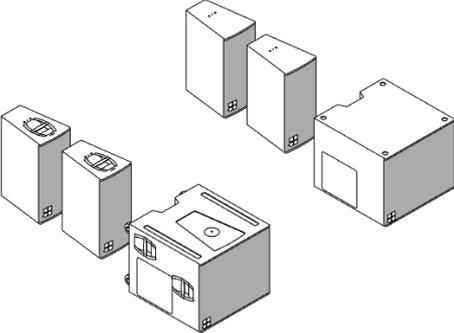
Refer to website or manual to check if Special Colour versions are available. d&b colours the products according to the RAL table. Parts that will be painted are the cabinet, grill and front rigging (d&b Metal Black). The *d&b always black* Material is used for parts of the components, which you cannot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

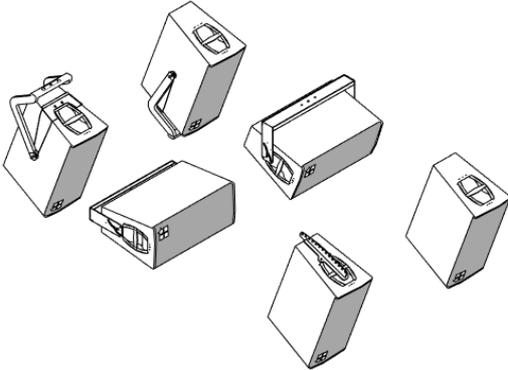
Materials and Finishes ^	
Enclosure Material	d&b Paint Black
Grill Material	d&b Metal Grill Black
Metal Material	d&b Metal Black

5. Point source families

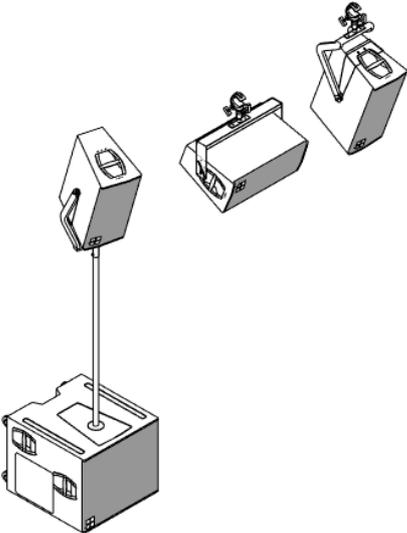
The point source families are usually placed on a level. *Pitch & Rotation* parameters allow you to rotate them according to the installation. Use the *Offset* parameter in the *Properties* to set the component on a specific height. Coverage lines and rotated horn can be shown. The speaker family contain mobile and installation variants. Accessories are already integrated within the speaker family. Additional accessories can be placed manually. Reference planes and "hidden markers" support you in positioning single accessories.



TOPs & SUBs

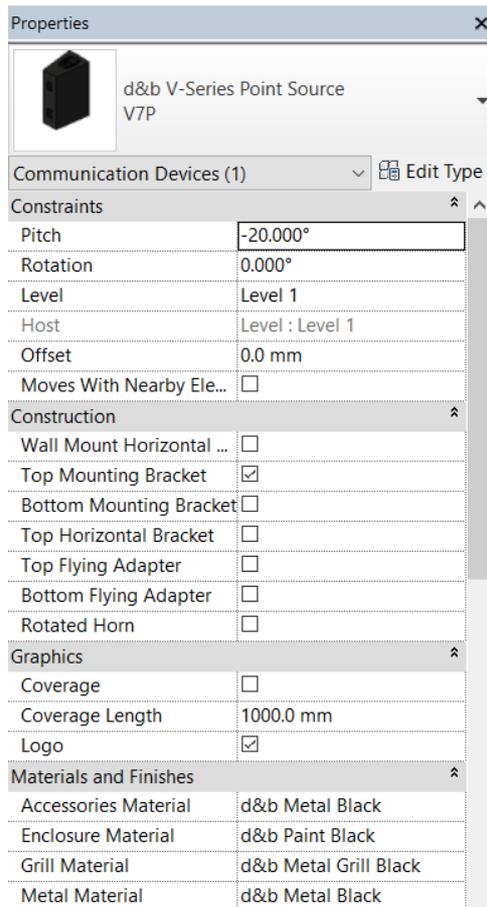


Integrated accessories



Combinations with additional manually placed accessories.

6. Point source families properties



Category	Property	Value
Constraints	Pitch	-20.000°
	Rotation	0.000°
	Level	Level 1
	Host	Level : Level 1
	Offset	0.0 mm
	Moves With Nearby Ele...	<input type="checkbox"/>
Construction	Wall Mount Horizontal ...	<input type="checkbox"/>
	Top Mounting Bracket	<input checked="" type="checkbox"/>
	Bottom Mounting Bracket	<input type="checkbox"/>
	Top Horizontal Bracket	<input type="checkbox"/>
	Top Flying Adapter	<input type="checkbox"/>
	Bottom Flying Adapter	<input type="checkbox"/>
	Rotated Horn	<input type="checkbox"/>
Graphics	Coverage	<input type="checkbox"/>
	Coverage Length	1000.0 mm
	Logo	<input checked="" type="checkbox"/>
Materials and Finishes	Accessories Material	d&b Metal Black
	Enclosure Material	d&b Paint Black
	Grill Material	d&b Metal Grill Black
	Metal Material	d&b Metal Black

Constraints

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

Construction

Check boxes to set the accessories.

Please select only one of the accessories.

Notes

Some of the accessories are only displayed, if this is allowed by the *Rotation* value, i.e. the Horizontal Bracket is not shown with rotation 90.000 degree, but with 0 or -180 degree.

Note the sample settings in the V-Series project.

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.

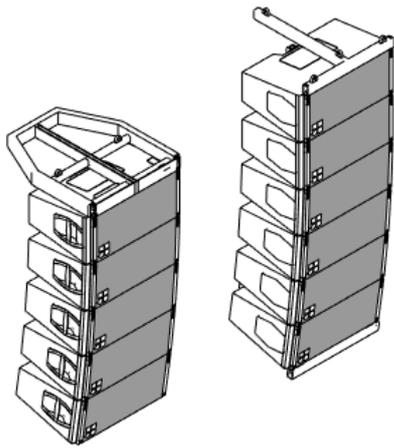
Materials

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

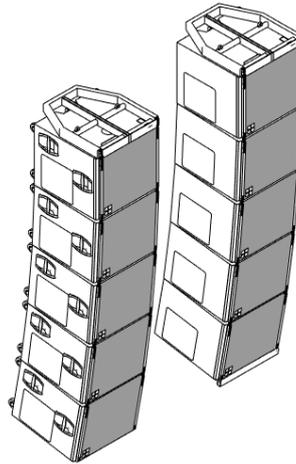
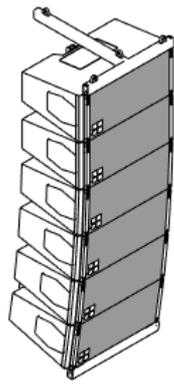
For custom materials, note the chapter 4. Materials

8. Line array families

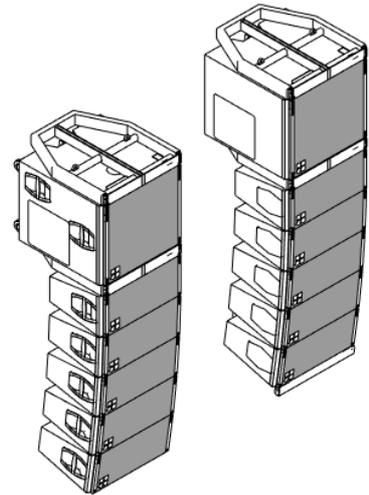
Instead of combining single speakers or subs manually to a line array in a Revit project (which is likely a cumbersome task), we have developed predefined line array families. They consist of nested families such as speakers, subs and frames. As they are nested families, they show up in the schedules.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



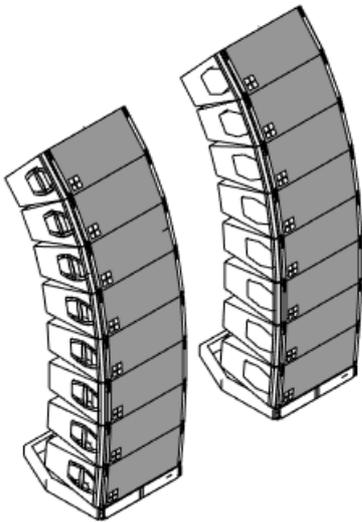
Flown array
TOPs



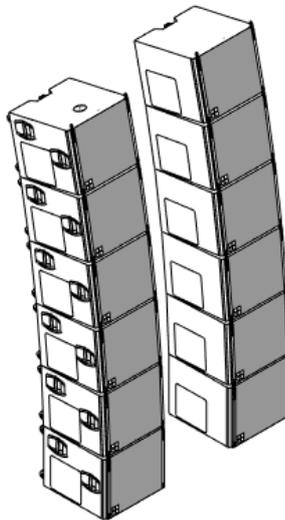
Flown array
SUBs



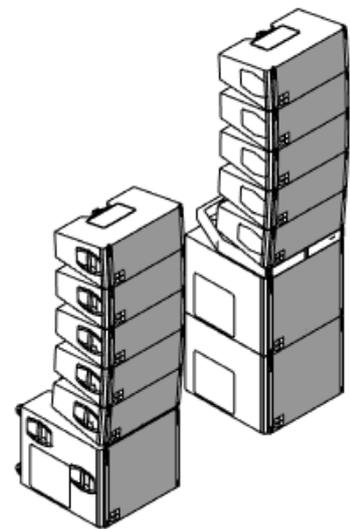
Flown array
SUBs & TOPs



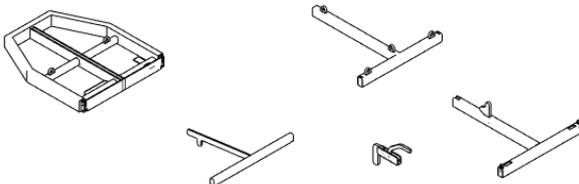
Ground stacked array
TOPs



Ground stacked array
SUBs



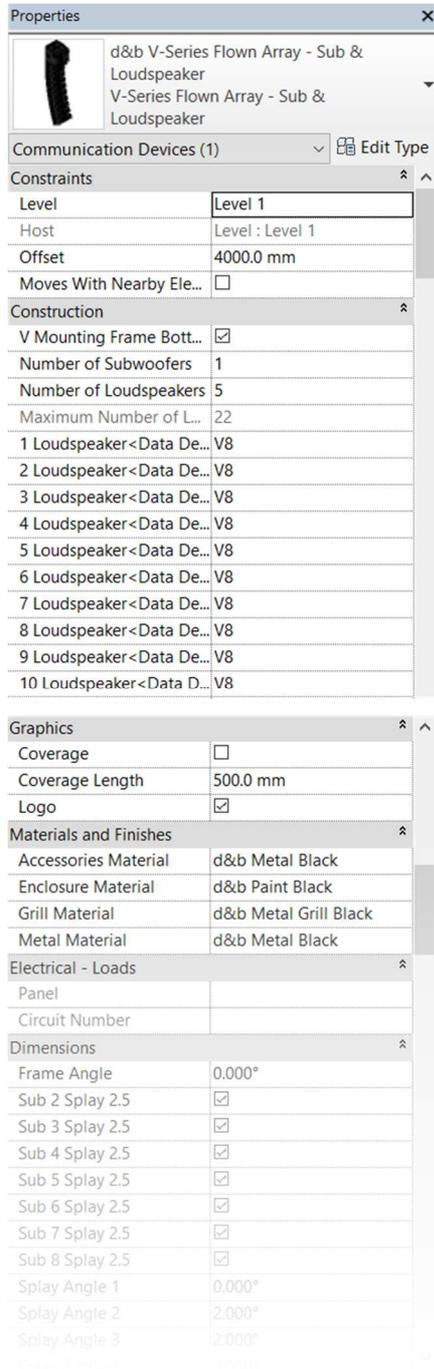
Ground stacked array
SUBs & TOPs



Integrated accessories

9. Line array families properties

The screenshot shows a sub & loudspeaker array. Sub arrays and Loudspeaker arrays have slightly different properties.



The Offset value defines the bottom height of the top frame.

Construction

Checkboxes for Mounting Frame Top/Bottom and Flying Frame for V and Vi series.

Number of Subwoofers and Loudspeakers

The maximum number of loudspeakers and subwoofers is shown as note.

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

1 Loudspeaker	[V8 or V12]	[Vi8 or Vi12]
2 Loudspeaker	[V8 or V12]	[Vi8 or Vi12]
3 Loudspeaker	[V8 or V12]	[Vi8 or Vi12]

Defines the use of V8/V12 or Vi8/Vi12 speakers, the prefix number stands for the position, measured from top for flown arrays, from bottom for ground stacked arrays.

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

SUBs: 0° or 2.5°

V10, Vi10: 0°;1°;2°;...;14°

10. 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: Load...

Type: Duplicate...

Rename...

Type Parameters

Parameter	Value
Construction ⌵	
Handle	<input checked="" type="checkbox"/>
Dimensions ⌵	
Height	700.0 mm
Width	308.0 mm
Depth	466.0 mm
Identity Data ⌵	
Part Number	Z0704
Support Email	support@dbaudio.com
Support Phone	+49 7191 9669-0
Type Image	
Keynote	
Model	V7P Loudspeaker
Manufacturer	d&b audiotechnik GmbH
URL	www.dbaudio.com
Type Comments	
Description	High performance 3-way point source lou
Assembly Code	
Cost	
Assembly Description	
Type Mark	
OmniClass Number	23.85.10.11.14.14.14
OmniClass Title	Loudspeakers
Code Name	
Data ⌵	
Frequency Range Low (-5 dB Standard)	59.00 Hz
Frequency Range High (-5 dB Standard)	18000.00 Hz
Max. SPL (1m, Free Field) with D20/30D	137
Max. SPL (1m, Free Field) with D80	140
SPL Max	140
SPL Stimulus	SPL max peak test signal: pink noise with cr
Cabinets per Amplifier Channel	2
Power Handling Capacity Peak 10 ms	2000.00 W
Power Handling Capacity RMS	500.00 W
Coverage Horizontal	75.000°
Coverage Vertical	40.000°
Weight	33.000 kg
LF Diameter	10 Inch
LF Quantity	2
MF Diameter	8 Inch
MF Quantity	1
HF Diameter	3 Inch
HF Quantity	1
HF Exit	1.4 inch
Connections	2 x NLT4 F/M, optional 2xNL4 or 2xEP5
Cabinet Materials	Marine Plywood
Cost MSRP	0.00
Cost Project	0.00

⌵

<< Preview OK Cancel Apply

d&b audiotechnik Revit Families V-Series README

11. 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	F	G	
Family	Type	Weight	Connections	Manufacturer	Model	Part Number	
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0724	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V101P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V101P Loudspeaker	Z0725	High performance 3-way point
d&b V-Series Point Source	V101P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V101P Loudspeaker	Z0705	High performance 3-way pass
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0724	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0724	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V101P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V101P Loudspeaker	Z0705	High performance 3-way pass
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series GSUB Subwoofer	Vi-GSUB	58.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	Vi-GSUB Subwoofer	Z0520	High performance cardioid su
d&b V-Series GSUB Subwoofer	Vi-GSUB	58.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	Vi-GSUB Subwoofer	Z0520	High performance cardioid su
d&b V-Series Flying Frame	V Flying Frame			d&b audiotechnik GmbH	V Flying Frame	Z5380	V Flying Frame for a maximu
d&b V-Series Flown Array - Sub	Y-Series Flown Array - Su			d&b audiotechnik GmbH	Flown Array with max 8		
d&b V-Series Flying Frame	V Flying Frame			d&b audiotechnik GmbH	V Flying Frame	Z5380	V Flying Frame for a maximu
d&b V-Series Ground Stacked Arr	Vi-Series Ground Stacked			d&b audiotechnik GmbH	Ground Stacked Array w		
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Mounting Frame To	Vi Mounting Frame Top			d&b audiotechnik GmbH	Vi Mounting Frame Top	Z5387_000	Vi Mounting Frame Top for a
d&b V-Series Flown Array - Loud	Vi-Series Flown Array - Lo			d&b audiotechnik GmbH	Flown Array with max.		
d&b V-Series Flown Array - Loud	Vi-Series Flown Array - Lo			d&b audiotechnik GmbH	Flown Array with max.		
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0535	High performance 3-way pass
d&b Vi-Series Flown Array - Sub	Vi-Series Flown Array - S			d&b audiotechnik GmbH	Flown Array with max 8		
d&b V-Series Flying Frame	V Flying Frame			d&b audiotechnik GmbH	V Flying Frame	Z5380	V Flying Frame for a maximu
d&b V-Series Line	V18	34.00 kg	2 x NLT4 F/M, optional 2xNL4 or screw terminal	d&b audiotechnik GmbH	V18 Loudspeaker	Z0515	High performance 3-way pass
d&b V-Series Flying Adapter	V Flying Adapter			d&b audiotechnik GmbH	V Flying Adapter	Z5385	V Flying Adapter for a maxim
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Subwoofer	V Sub	64.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V Subwoofer	Z0518	High performance flyable carc
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b V-Series Point Source	V17P	33.00 kg	2 x NLT4 F/M, optional 2xNL4 or 2xEP5	d&b audiotechnik GmbH	V17P Loudspeaker	Z0704	High performance 3-way point
d&b TV Speaker	TV Speaker			d&b audiotechnik GmbH	TV Speaker	Z5310	TV Speaker with Flown Plate

12. Tags

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

