

d&b audiotechnik Revit Families SL-Series README

1. Overview

The d&b Revit families are based on Revit version 2018 and are created as *Communication Device* families. All families are composed at a glance in the project *d&b audiotechnik Revit Families SL-Series.rvt*. It contains all components of the SL-Series. Basically, the SL-Series contain TOPs, SUBs, 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.

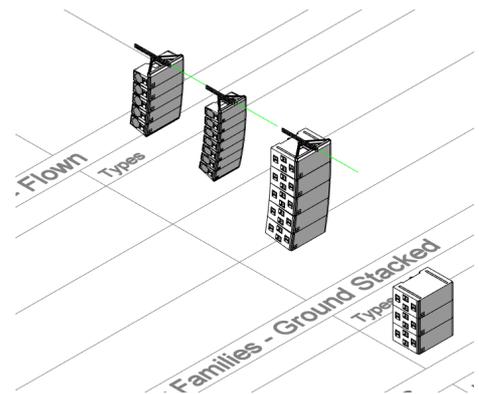
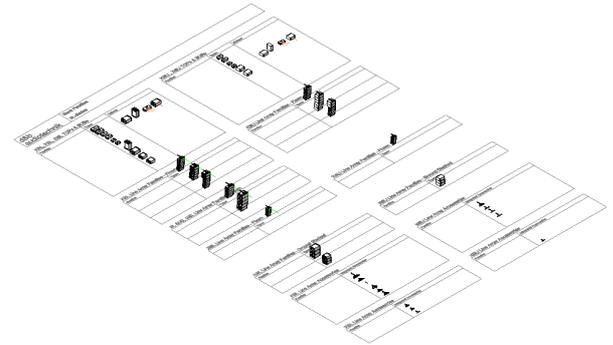
KSL, XSL, QSL TOPs & SUBs			KSL, XSL TOPs & SUBs		
Parties	Type	Options	Parties	Type	Options
400 d&b Audiotech KSL	Top	...	400 d&b Audiotech KSL	Top	...
400 d&b Audiotech XSL	Top	...	400 d&b Audiotech XSL	Top	...
400 d&b Audiotech QSL	Top	...	400 d&b Audiotech QSL	Top	...
400 d&b Audiotech KSL SUB	Sub	...	400 d&b Audiotech KSL SUB	Sub	...
400 d&b Audiotech XSL SUB	Sub	...	400 d&b Audiotech XSL SUB	Sub	...
400 d&b Audiotech QSL SUB	Sub	...	400 d&b Audiotech QSL SUB	Sub	...

KSL Line Array Families - Flown			KSL Line Array Families - Flown		
Parties	Type	Options	Parties	Type	Options
400 d&b Audiotech KSL Line Array - 120°	Flown	...	400 d&b Audiotech KSL Line Array - 120°	Flown	...
400 d&b Audiotech KSL Line Array - 90°	Flown	...	400 d&b Audiotech KSL Line Array - 90°	Flown	...
400 d&b Audiotech KSL Line Array - 60°	Flown	...	400 d&b Audiotech KSL Line Array - 60°	Flown	...

SL SUB, QSL Line Array Families - Flown			XSL Line Array Families - Flown		
Parties	Type	Options	Parties	Type	Options
400 d&b Audiotech SL SUB Line Array - 120°	Flown	...	400 d&b Audiotech XSL Line Array - 120°	Flown	...
400 d&b Audiotech SL SUB Line Array - 90°	Flown	...	400 d&b Audiotech XSL Line Array - 90°	Flown	...
400 d&b Audiotech SL SUB Line Array - 60°	Flown	...	400 d&b Audiotech XSL Line Array - 60°	Flown	...

KSL Line Array Families - Ground Stacked			XSL Line Array Families - Ground Stacked		
Parties	Type	Options	Parties	Type	Options
400 d&b Audiotech KSL Line Array - 120°	Ground Stacked	...	400 d&b Audiotech XSL Line Array - 120°	Ground Stacked	...
400 d&b Audiotech KSL Line Array - 90°	Ground Stacked	...	400 d&b Audiotech XSL Line Array - 90°	Ground Stacked	...
400 d&b Audiotech KSL Line Array - 60°	Ground Stacked	...	400 d&b Audiotech XSL Line Array - 60°	Ground Stacked	...

KSL Line Array Accessories			XSL Line Array Accessories		
Parties	Integrated Accessories	Options	Parties	Integrated Accessories	Options
400 d&b Audiotech KSL Line Array - 120°	400 d&b Audiotech XSL Line Array - 120°
400 d&b Audiotech KSL Line Array - 90°	400 d&b Audiotech XSL Line Array - 90°
400 d&b Audiotech KSL Line Array - 60°	400 d&b Audiotech XSL Line Array - 60°



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

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

d&b audiotechnik Revit Families SL-Series README

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

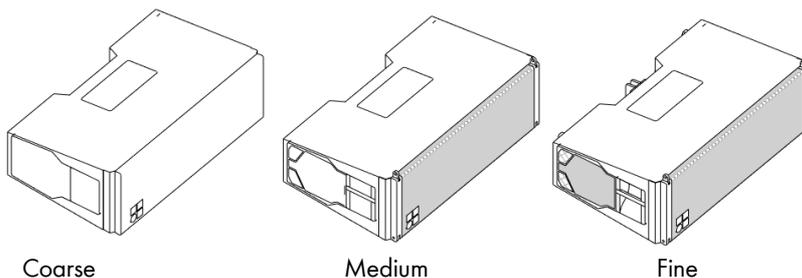
1. Open your project.
2. Open the *d&b audiotechnik Revit Families SL-Series.rvt*
3. In this project, select a family.
4. In the *Modify* menu run *Edit Family*.
This opens the Family Editor.
5. From here, run *Load into Project* (or *Load into Project and Close*) and select your project.
The family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

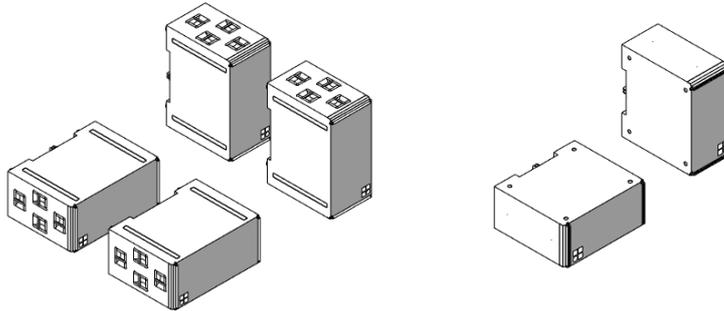
Refer to website or manual to check if Special Colour versions are available. d&b colours the products according to the RAL table. Parts that will be painted are the cabinet, grill and front rigging (d&b Metal Black). The *d&b always black* Material is used for parts of the components, which you cannot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

The SL-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

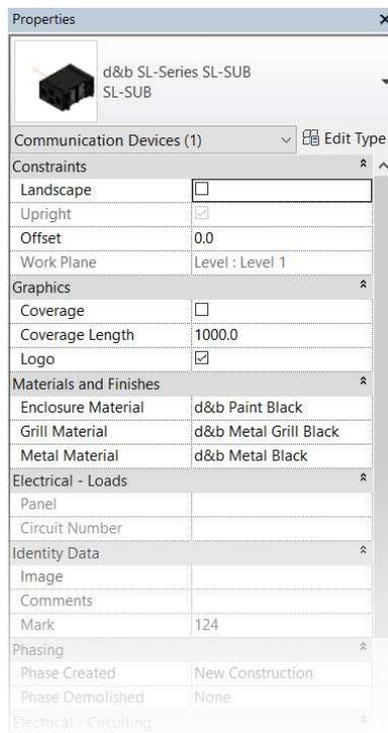
5. Subwoofer families

The subwoofer families are usually placed on a level. Use the Offset parameter in the Properties to set the component on a specific height. The "Landscape" and "Upright" parameters place the subwoofers in horizontal or vertical orientation.



SUBs with "Landscape" and "Upright" orientation

6. Subwoofer families properties



Constraints

The "Landscape" and "Upright" parameters place the subwoofers in horizontal or vertical orientation.

Graphics

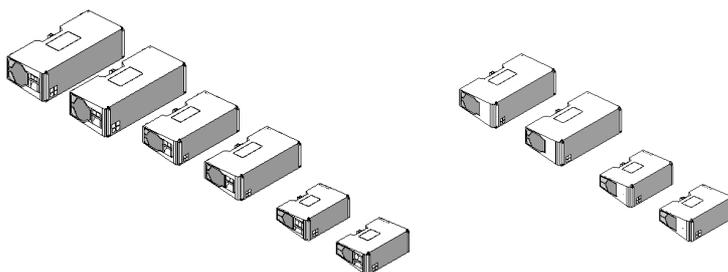
Shows the coverage lines and the length of the Coverage lines. Further the d&b Logo can be deactivated.

Materials

Assignment of d&b materials for the different components of the families. For custom materials, note the chapter 4. Materials

7. Loudspeaker families

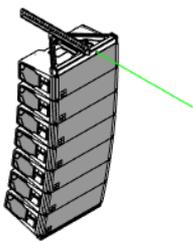
The TOPs of the SL-Series are integrated in the line array families. All loudspeaker properties can be set in the line array families.



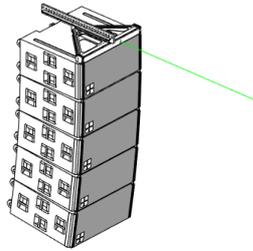
GSL, KSL,XSL, KSLi, XSLi TOPs

8. Line array families

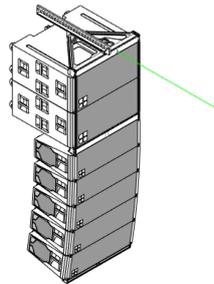
Instead of combining single speakers or subs manually to a line array in a Revit project (which is likely a cumbersome task), we have developed predefined line array families. They consist of nested families such as speakers, subs and frames. As they are nested families, they show up in the schedules. 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:



KSL Flown array
TOPs



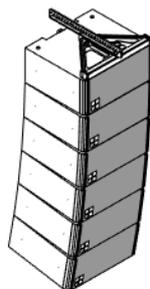
KSL Flown array
SUBSs



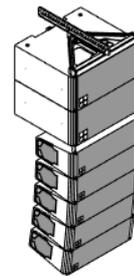
KSL Flown array
TOPs & SUBSs



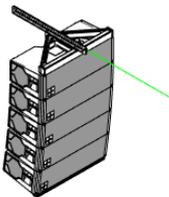
KSLi Flown array
TOPs



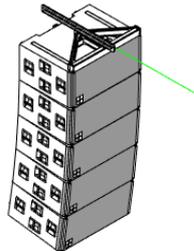
KSLi Flown array
SUBSs



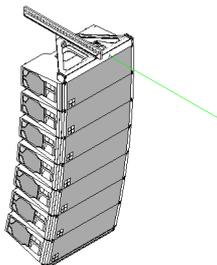
KSLi Flown array
TOPs & SUBSs



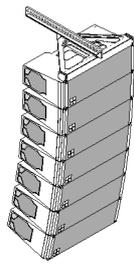
GSL Flown array
TOPs



SL Flown array
SUBSs

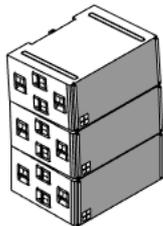


XSL Flown array
TOPs

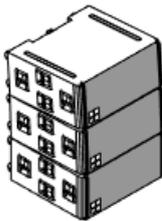


XSLi Flown array
TOPs

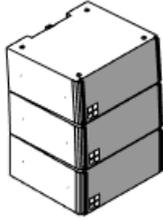
d&b audiotechnik Revit Families SL-Series README



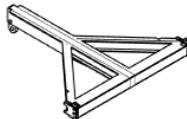
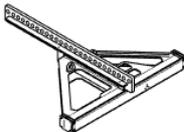
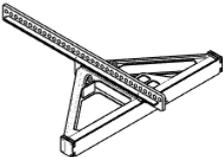
Ground stacked array
SL SUBs



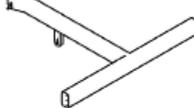
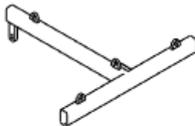
Ground stacked array
KSL SUBs



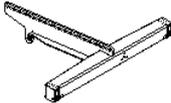
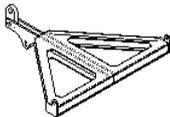
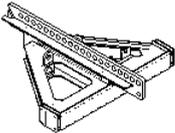
Ground stacked array
KSLi SUBs



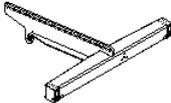
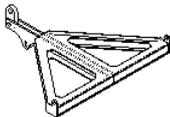
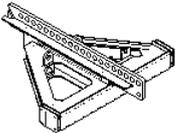
KSL Integrated accessories



KSLi Integrated accessories



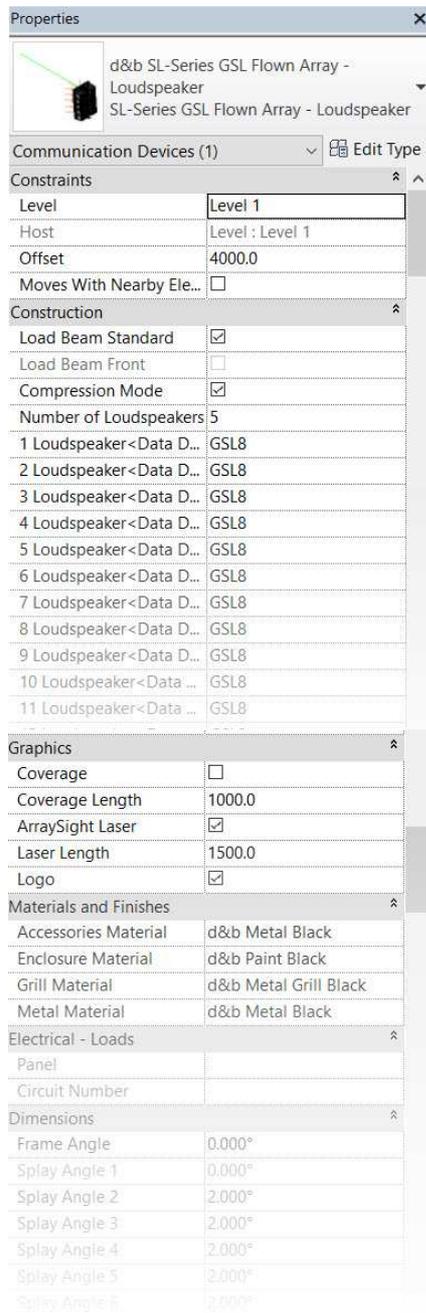
XSL Integrated accessories



XSLi Integrated accessories

9. KSL, XSL Line array families properties

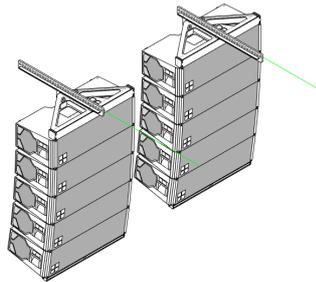
The screenshot shows a sub & loudspeaker array. Sub arrays and Loudspeaker arrays have slightly different properties.



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

Construction

Load Beam Standard / Load Beam Front
Defines the position of the Load Beam



Compression Frame
Displays / hides the Compression Frame

Number of Subwoofers and Loudspeakers

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

1 Loudspeaker	[GSL8 or GSL12]	[KSL8 or KSL12]
2 Loudspeaker	[GSL8 or GSL12]	[KSL8 or KSL12]
3 Loudspeaker	[GSL8 or GSL12]	[KSL8 or KSL12]

Defines the use of GSL8/GSL12 or KSL8/KSL12 speakers, the prefix number stands for the position, measured from top for flown arrays.

Graphics

Shows the coverage lines and the length of the Coverage lines. Additionally, the integrated ArraySight Laser can be set and the d&b Logo can be deactivated.

Materials

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

ArraySight Laser / Laser Length

Shows the integrated array sight Sender Unit and defines the laser line length.

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!

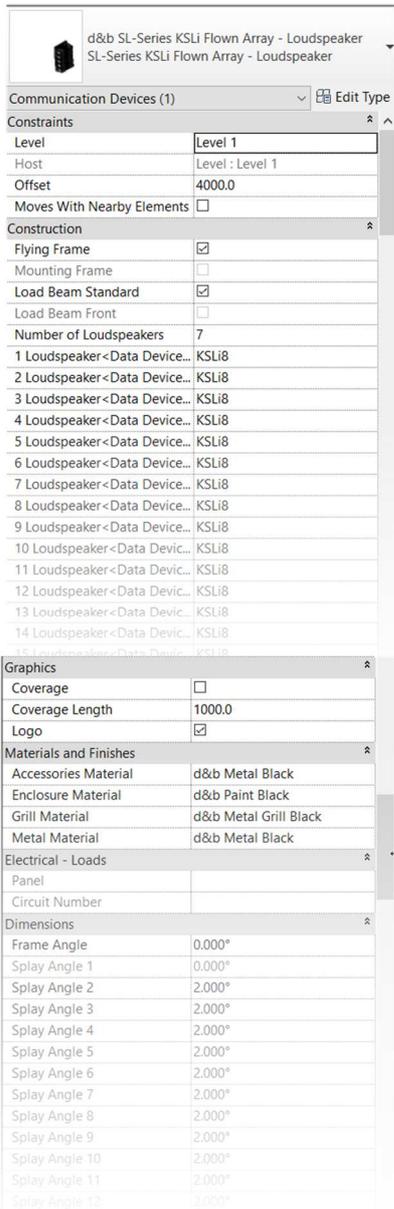
SUBs: 0° or 2.5°

GSL8, GSL12, KSL8, KSL12: 0°;1°;2°;...;7°

XSL8, XSL12: 0°;1°;2°;...;14°

10. KSLi, XSLi Line array families properties

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

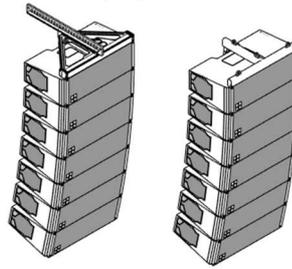


The Offset value defines the bottom height of the top frame.

Construction

Flying Frame

Shows the Flying Frame instead of the Mounting Frame



Load Beam Standard / Load Beam Front

Defines the position of the Load Beam

Number of Subwoofers and Loudspeakers

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

1 Loudspeaker	[KSLi8 or KSLi12]
2 Loudspeaker	[KSLi8 or KSLi12]
3 Loudspeaker	[KSLi8 or KSLi12]

Defines the use of KSLi8/KSLi12 speakers, the prefix number stands for the position, measured from top for flown arrays.

Graphics

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

Materials

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

ArraySight Laser / Laser Length

Shows the integrated array sight Sender Unit and defines the laser line length (optionally for XSLi only).

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 2.0°

KSLi8, KSLi12: 0°;1°;2°;...;7°

XSLi8, XSLi12: 0°;1°;2°;...;14°

d&b audiotechnik Revit Families SL-Series README

11. 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 SL-Series GSL Load...

Type: GSL8 Duplicate... Rename...

Type Parameters

Parameter	Value
Constraints	
Default Elevation	0.0
Dimensions	
Height	391.0
Width	1300.0
Depth	627.0
Identity Data	
Part Number	Z0750
Support Email	support@dbaudio.com
Support Phone	+49 7191 9669-0
Type Image	
Keynote	
Model	GSL8
Manufacturer	d&b audiotechnik
URL	http://www.dbaudio.com/
Type Comments	
Description	Line array module specifically designed fo
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)	45.00 Hz
Frequency Range High (-5 dB Standard)	18000.00 Hz
Max. SPL (1m, Free Field) with D80	150
SPL Max	150
SPL Stimulus	Broadband signal IEC 60268
Cabinets per D80	2 (AP)
Power Handling Capacity Peak 10 ms	3200.00 W
Power Handling Capacity RMS	800.00 W
Coverage Horizontal	80.000°
Splay Angle Maximum	7.000°
Splay Angle Minimum	0.000°
Weight	80.000 kg
LF Front Diameter	14"
LF Front Quantity	2
LF Rear Diameter	10"
LF Rear Quantity	2
MF Diameter	10"
MF Quantity	1
HF Diameter	3/4"
HF Quantity	3
HF Exit	1.4"
Connections	1xNLT4F
Cabinet Materials	Marine Plywood
Cost MSRP	0.00
Cost Project	0.00

d&b audiotechnik Revit Families SL-Series README

11. Schedules

Note:

The *Communication Device* Schedule in *d&b audiotechnik Revit Families SL-Series.rvt*.

It counts the components including their data.

A	B	C	D	E	F	G	H
v	Type	Weight	Connections	Manufacturer	Model	Part Number	Description
d&b SL-Series GSL Flying Fram	GSL Flying Frame	44.00 kg		d&b audiotechnik	GSL Flying Frame	25701	GSL Flying Frame
d&b SL-Series GSL Compresio	GSL Compression Frame	18.60 kg		d&b audiotechnik	GSL Compression Frame	25703	GSL Compression Frame
d&b SL-Series GSL Load Beam	GSL Load Beam	29.00 kg		d&b audiotechnik	GSL Load Beam	25702	GSL Load Beam
d&b SL-Series Array/Sight Sende	Array/Sight Sender Unit			d&b audiotechnik	Array/Sight Sender Unit	25711	Array/Sight Sender Unit
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series G-SUB	SL G-SUB	139.00 kg	1xNLT4F	d&b audiotechnik	SL G-SUB	20761	Cardioid subwoofers to compliment
d&b SL-Series Ground Stacked	SL-Series Ground Stacked			d&b audiotechnik	Ground Staked Array with max. 3 SL SUB Subwoofer		
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series Flown Array - Su	SL-Series Flown Array - S			d&b audiotechnik	Flown Array with max. 14 SL SUB Subwoofers		
d&b SL-Series GSL Flying Frame	GSL Flying Frame	44.00 kg		d&b audiotechnik	GSL Flying Frame	25701	GSL Flying Frame
d&b SL-Series Array/Sight Sender	Array/Sight Sender Unit			d&b audiotechnik	Array/Sight Sender Unit	25711	Array/Sight Sender Unit
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series SL-SUB	SL-SUB	130.00 kg	1xNLT4F	d&b audiotechnik	SL SUB	20760	Cardioid subwoofers to compliment
d&b SL-Series GSL Flown Array	SL-Series GSL Flown Arr			d&b audiotechnik	Flown Array with max. 24 GSL8/GSL12 Loudspeaker		
d&b SL-Series GSL Flying Frame	GSL Flying Frame	44.00 kg		d&b audiotechnik	GSL Flying Frame	25701	GSL Flying Frame
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series Array/Sight Sende	Array/Sight Sender Unit			d&b audiotechnik	Array/Sight Sender Unit	25711	Array/Sight Sender Unit
d&b SL-Series GSL Load Beam	GSL Load Beam	29.00 kg		d&b audiotechnik	GSL Load Beam	25702	GSL Load Beam
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series GSL	GSL12	80.00 kg	1xNLT4F	d&b audiotechnik	GSL12	20751	Line array module specifically desig
d&b SL-Series GSL	GSL8	80.00 kg	1xNLT4F	d&b audiotechnik	GSL8	20750	Line array module specifically desig
d&b SL-Series KSL	KSL8	58.00 kg	NLT4 F/M	d&b audiotechnik	KSL8	20780	Line array module for medium to lar
d&b SL-Series KSL	KSL12	68.00 kg	NLT4 F/M	d&b audiotechnik	KSL12	20781	Line array module for medium to lar
d&b SL-Series KSL Flying Fram	KSL Flying Frame	30.30 kg		d&b audiotechnik	KSL Flying Frame	25722	KSL Flying Frame
d&b SL-Series KSL Load Beam	KSL Load Beam	21.00 kg		d&b audiotechnik	KSL Load Beam	25723	KSL Load Beam
d&b SL-Series KSL Compresio	KSL Compression Frame	16.00 kg		d&b audiotechnik	KSL Compression Frame	25725	KSL Compression Frame
d&b SL-Series KSL Flown Array	SL-Series KSL Flown Arra			d&b audiotechnik	Flown Array with max. 24 KSL8/KSL12 Loudspeaker		
d&b SL-Series KSL Flying Frame	KSL Flying Frame	30.30 kg		d&b audiotechnik	KSL Flying Frame	25722	KSL Flying Frame

12. Tags

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



Z0750 GSL8



Z0751 GSL12



Z0780 KSL8



Z0781 KSL12



Z0760 SL-SUB



Z0761 SL G-SUB