







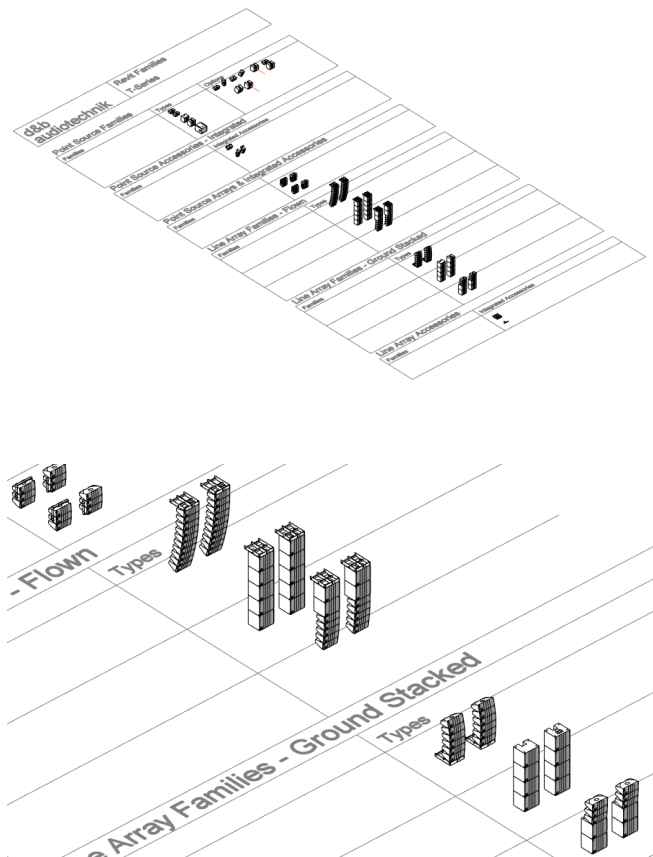


d&b audiotechnik Revit Families T-Series README

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 T-Series.rvt*. It contains all components of the T-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.

 		Version 6.3.126.0
Point Source Families		
Families	Types	Options
  	  	



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

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

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

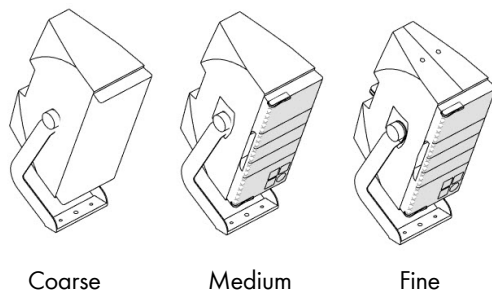
1. Open your project.
2. Open the *d&b audiotechnik Revit Families T-Series.rvt*
3. In this project, select a family.
4. In the *Modify* menu run *Edit Family*.
This opens the Family Editor.
5. From here, run *Load into Project* (or *Load into Project and Close*) and select your project.
The family is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

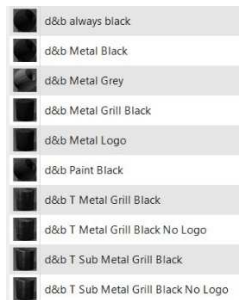
d&b audiotechnik Materials are already set in the *Properties* of the families. The materials are already predefined for visualization in Revit.

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 (d&b Paint black), grill (d&b T Metal Grill Black d&b T Sub Grill black) 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 T-Series is using custom textures for the grill.

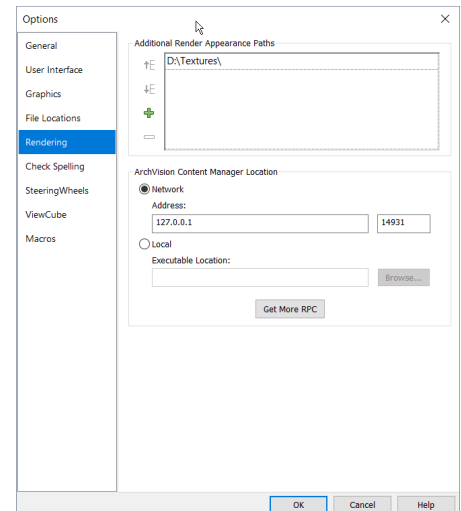
Due to the special grill design of the T-series, you need to assign the "...No Logo" material for grill, if you want to display subs and tops with no logo. Note the sample settings in the T-Series project.

d&b audiotechnik Revit Families T-Series README



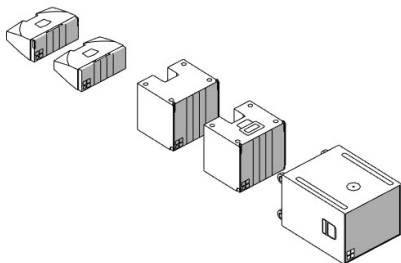
In order to view these materials properly in realistic views and renderings:

1. Download and extract the Textures.zip from the d&b web site to any local drive.
2. In Revit, run Menu Browser > Options (File menu in Revit versions later than 2016), switch to the Render tab and set the "Additional Render Appearance Paths" in the Revit Options dialog to the folder where you have unzipped the jpg's (in the screenshot, the textures have been extracted to D:\Textures).

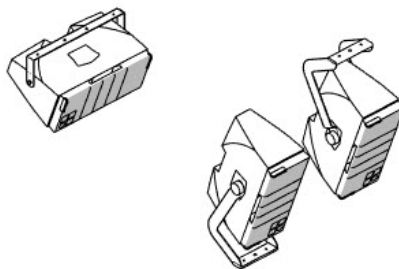


5. Point source families

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.

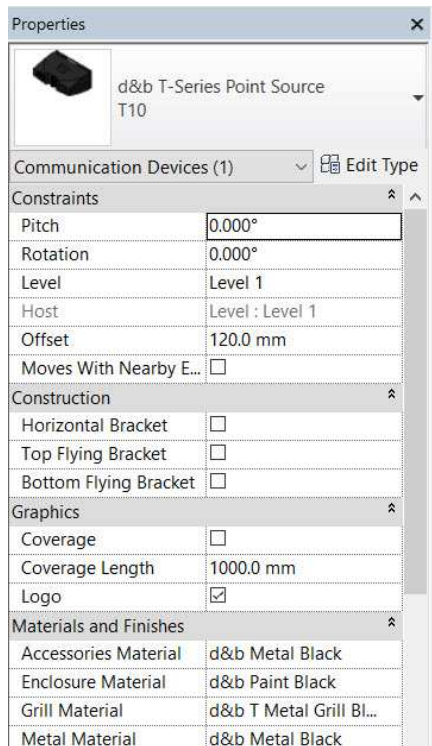


TOPs & SUBs



Integrated accessories

6. Point source families properties



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 T-Series project.

Graphics

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

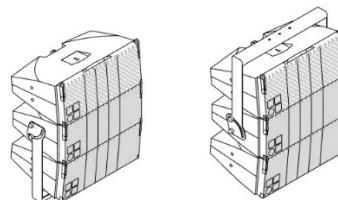
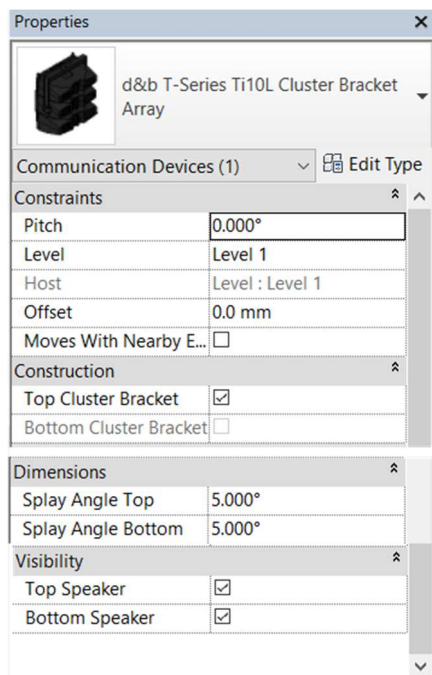
Further the d&b Logo can be deactivated. If you select *Rotated Horn* under the *Construction* headline, Coverage lines will be rotated as well.

Materials

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

Note the chapter 4. Materials on the left side.

7. Cluster Bracket Array Families



Constraints

Pitch defines the rotation of the centered speaker.

Construction

Check boxes to set top or bottom cluster bracket.

Dimensions

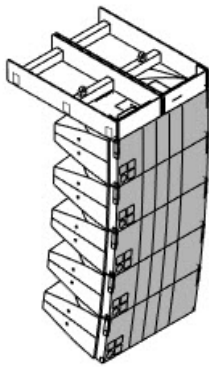
Defines the splay angles for the top and bottom speaker.

Visibility

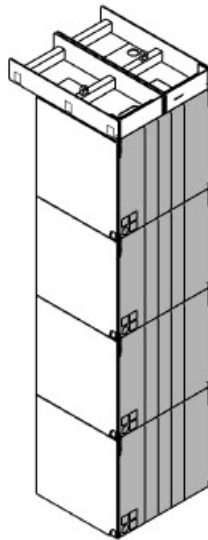
Allows to switch top or bottom speaker off.

8. Line array families

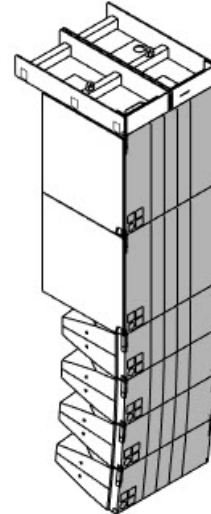
Instead of combining single speakers or subs manually to a line array in a Revit project (which is likely a cumbersome task), we have developed predefined line array families. They consist of nested families such as speakers, subs and frames. As they are nested families, they show up in the schedules.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



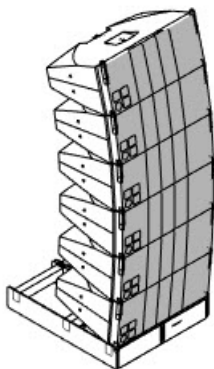
Flown array
TOPs



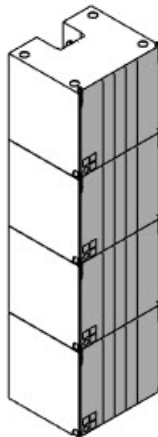
Flown array
SUBs



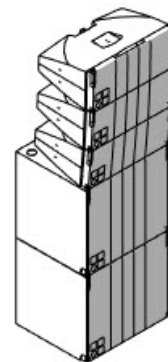
Flown array
SUBs & TOPs



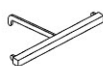
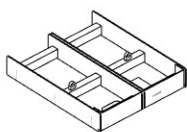
Ground stacked array
TOPs



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.

Properties

d&b Ti-Series Flown Array - Sub & Loudspeakers

Communication Devices (1) Edit Type

Constraints

Level	Level 1
Host	Level : Level 1
Offset	3000.0 mm
Moves With Nearby E...	<input type="checkbox"/>

Construction

Number of Subwoofers	2
Number of Loudspea...	5
Maximum Number of...	17

Graphics

Coverage	<input type="checkbox"/>
Coverage Length	500.0 mm
Logo	<input checked="" type="checkbox"/>

Materials and Finishes

Enclosure Material	d&b Paint Black
Metal Material	d&b Metal Black
Subwoofer Grill Mate...	d&b T Sub Metal Gri...
Loudspeaker Grill Mat...	d&b T Metal Grill Bl...

Dimensions

Frame Angle	0.000°
Splay Angle 2	2.000°
Splay Angle 3	2.000°
Splay Angle 4	2.000°
Splay Angle 5	2.000°
Splay Angle 6	2.000°
Splay Angle 7	2.000°
Splay Angle 8	2.000°
Splay Angle 9	2.000°
Splay Angle 10	2.000°
Splay Angle 11	2.000°
Splay Angle 12	2.000°
Splay Angle 13	2.000°
Splay Angle 14	2.000°
Splay Angle 15	2.000°
Splay Angle 16	2.000°
Splay Angle 17	2.000°
Splay Angle 18	2.000°
Splay Angle 19	2.000°

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

Construction

Checkboxes for Flying Bar / Flying Frame for flown Ti speaker arrays only.

Number of Subwoofers and Loudspeakers

The maximum number of loudspeakers is shown as notes.

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

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!

T10, Ti10L: 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:
d&b T-Series Point Source
Load...

Type:
T10
Duplicate...

Rename...

Type Parameters

Parameter	Value
Construction	
T10	<input checked="" type="checkbox"/>
Dimensions	
Height	197.0 mm
Width	470.0 mm
Depth	300.0 mm
Identity Data	
Part Number	Z0550
Support Email	support@dbaudio.com
Support Phone	+49 7191 9669-0
Type Image	
Keynote	
Model	T10 Loudspeaker
Manufacturer	d&b audiotechnik GmbH
URL	www.dbaudio.com
Type Comments	
Description	Hi2-way loudspeaker with rotatable horn f
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)	68.00 Hz
Frequency Range High (-5 dB Standard)	18000.00 Hz
Max. SPL (1m, Free Field) with D6/10D	129
Max. SPL (1m, Free Field) with D20/30D	132
Max. SPL (1m, Free Field) with D80	132
SPL Max	132
SPL Stimulus	SPL max peak test signal: pink noise with c
Cabinets per Amplifier Channel	4
Power Handling Capacity Peak 10 ms	800.00 W
Power Handling Capacity RMS	200.00 W
Coverage Horizontal	90.000°
Coverage Vertical	35.000°
Weight	11.000 kg
LF Diameter	6.5 Inch
LF Quantity	2
HF Quantity	1
HF Exit	1.4 inch
Connections	2 x NLT4 F/M, optional 2xNL4 or 2xEP5
Cabinet Materials	Hard Integral Foam
Cost MSRP	0.00
Cost Project	0.00

<< Preview
OK
Cancel
Apply

d&b audiotechnik Revit Families T-Series README

11. Schedules






Note:

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

Family	Type	Manufacturer	Model	Part Number	Description
d&b T-Series Point Source	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	Hi2-way loudspeaker with rotatable horn for point and line
d&b T-Series Subwoofer	Ti-Sub	d&b audiotechnik GmbH	Ti-SUB subwoofer	Z0561	High performance flyable subwoofer for fixed installation
d&b T-Series Subwoofer	T-Sub	d&b audiotechnik GmbH	T-SUB subwoofer	Z0560	High performance flyable subwoofer
d&b T-Series Flying Frame	T Flying Frame	d&b audiotechnik GmbH	T Flying Frame	Z5370	T Flying Frame for a maximum of 20 loudspeakers or 10 s
d&b T-Series Point Source	Ti10P	d&b audiotechnik GmbH	Ti10P Loudspeaker	Z0552	High performance 2-way passive point source loudspeaker
d&b T-Series Flown Array - Loudspeaker	d&b T-Series Flown Array	d&b audiotechnik GmbH	Flown Array with max.		
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series Flying Bar	T Flying Bar	d&b audiotechnik GmbH	T Flying Bar	Z5374	T Flying Bar for a maximum of 8 Ti10L loudspeakers
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series Flown Array - Loudspeaker	d&b Ti-Series Flown Array	d&b audiotechnik GmbH	Flown Array with max.		
d&b T-Series T10 Line	Ti10L	d&b audiotechnik GmbH	Ti10L Loudspeaker	Z0551	High performance 2-way passive line source loudspeaker f
d&b T-Series T10 Line	Ti10L	d&b audiotechnik GmbH	Ti10L Loudspeaker	Z0551	High performance 2-way passive line source loudspeaker f
d&b T-Series T10 Line	Ti10L	d&b audiotechnik GmbH	Ti10L Loudspeaker	Z0551	High performance 2-way passive line source loudspeaker f
d&b T-Series T10 Line	Ti10L	d&b audiotechnik GmbH	Ti10L Loudspeaker	Z0551	High performance 2-way passive line source loudspeaker f
d&b T-Series T10 Line	Ti10L	d&b audiotechnik GmbH	Ti10L Loudspeaker	Z0551	High performance 2-way passive line source loudspeaker f
d&b T-Series Flying Frame	T Flying Frame	d&b audiotechnik GmbH	T Flying Frame	Z5370	T Flying Frame for a maximum of 20 loudspeakers or 10 s
d&b Ti-Series Flown Array - Subwoofers	d&b Ti-Series Flown Array	d&b audiotechnik GmbH	Flown Array with max.		
d&b T-Series Flying Frame	T Flying Frame	d&b audiotechnik GmbH	T Flying Frame	Z5370	T Flying Frame for a maximum of 20 loudspeakers or 10 s
d&b T-Series Flying Frame	T Flying Frame	d&b audiotechnik GmbH	T Flying Frame	Z5370	T Flying Frame for a maximum of 20 loudspeakers or 10 s
d&b T-Series Flown Array - Subwoofers	d&b T-Series Flown Array	d&b audiotechnik GmbH	Flown Array with max.		
d&b T-Series Flying Frame	T Flying Frame	d&b audiotechnik GmbH	T Flying Frame	Z5370	T Flying Frame for a maximum of 20 loudspeakers or 10 s
d&b T-Series Point Source	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	Hi2-way loudspeaker with rotatable horn for point and line
d&b T-Series Horizontal Bracket	T Horizontal Bracket	d&b audiotechnik GmbH	T Horizontal Bracket	Z5372	
d&b T-Series Point Source	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	Hi2-way loudspeaker with rotatable horn for point and line
d&b T-Series Flying Bracket	T Flying Bracket	d&b audiotechnik GmbH	T Flying Bracket	Z5371	
d&b T-Series Point Source	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	Hi2-way loudspeaker with rotatable horn for point and line
d&b T-Series Flying Bracket	T Flying Bracket	d&b audiotechnik GmbH	T Flying Bracket	Z5371	
d&b T-Series T10 Cluster Bracket Array	d&b T-Series T10 Cluster	d&b audiotechnik GmbH	Cluster Bracket Array		
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Cluster Bracket Array	d&b T-Series T10 Cluster	d&b audiotechnik GmbH	Cluster Bracket Array		
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so
d&b T-Series T10 Line	T10	d&b audiotechnik GmbH	T10 Loudspeaker	Z0550	2-way loudspeaker with rotatable horn for point and line so

12. Tags

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

	Z0550	T10
	Z0552	Ti10P
	Z0561	Ti-Sub
	Z0560	T-Sub
	Z0710	B4 Sub