

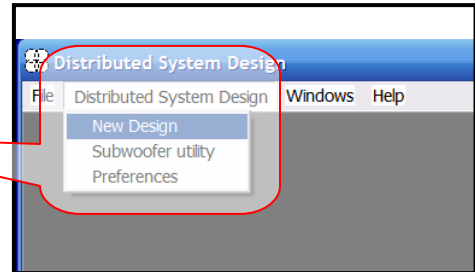
# How to use JBL's Distributed System Design Software

From Jeff McDonald, Plus Four Marketing

For more complete instructions, explanations and recommendations, see the README.TXT file in the DSD folder.

Download JBL's DSD from [http://www.jblpro.com/pages/software\\_downloads.htm](http://www.jblpro.com/pages/software_downloads.htm) and select the *Distributed System Design (DSD)* -this will have the most current version

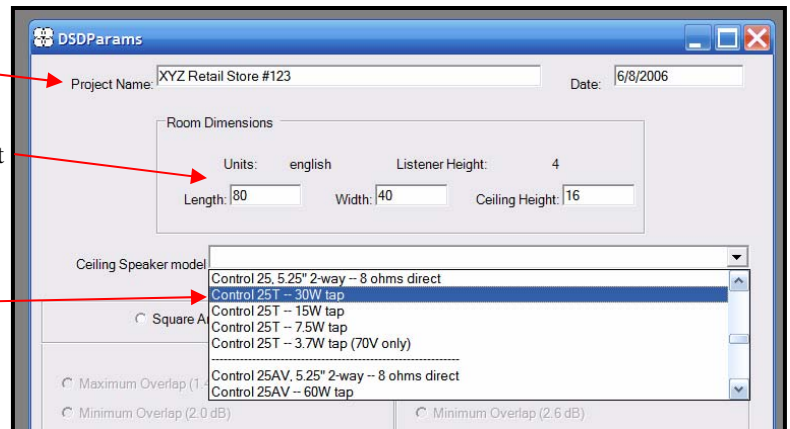
Launch the program. To start your design, click on the Distributed System Design menu and click New Design



1- Name your project

2- Input the room dimensions: length, width and height (length must be greater than width).

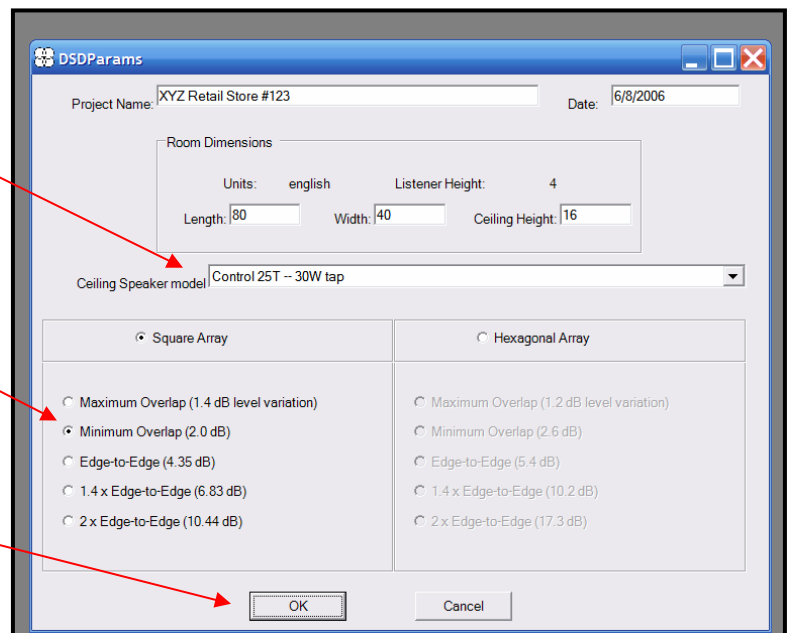
3- Select which model you are using  
-In this case we are using a Control 25T (on the ceiling, pointing straight down).  
For available models, click on [http://www.jblpro.com/pages/install/cc\\_main.htm](http://www.jblpro.com/pages/install/cc_main.htm)



4- Choose either Square or Hexagonal Array (this can be adjusted later to determine what is best for the room. Square is usually best for first choice.)

5- Choose the dB variation you expect (1.4x and 2x are NOT recommended except for very non-critical projects).

6- Click OK to see the results



This is the Distributed System Design

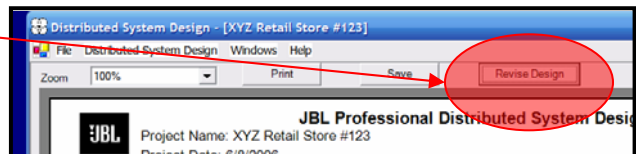
The screenshot shows the 'Distributed System Design' window for 'XYZ Retail Store #123'. The main area displays a room layout with speaker positions marked by asterisks. Dimensions are labeled: Side Wall 80 (feet), End wall 40 (feet), and speaker spacing of 16.4 feet. A summary section on the right provides the following details:

- Type of Speaker/Connection: Control 25T -- 30W tap
- Layout Type: Square
- Spacing Selection: Minimum Overlap
- Room Length (feet): 80
- Room Width (feet): 40
- Ceiling Height (feet): 16
- Listener Height (feet): 4
- Number of Speakers: 10
- Number of Rows: 2
- Number of Columns: 5
- Row Spacing (feet): 16.4
- Column Spacing (feet): 16.4
- Row Distance from Each Side Wall (feet): 11.8
- Column Distance from Each End Wall (feet): 7.2
- Maximum Continuous Average SPL (Pink Noise, dB): 93.5
- Maximum Continuous Peak SPL (Pink Noise, dB): 99.5
- Maximum Continuous Average SPL (music speech, dB): 89.5**
- Expected Level Variation (dB): 2.0
- Recommended Amplifier Power (watts): 360.0

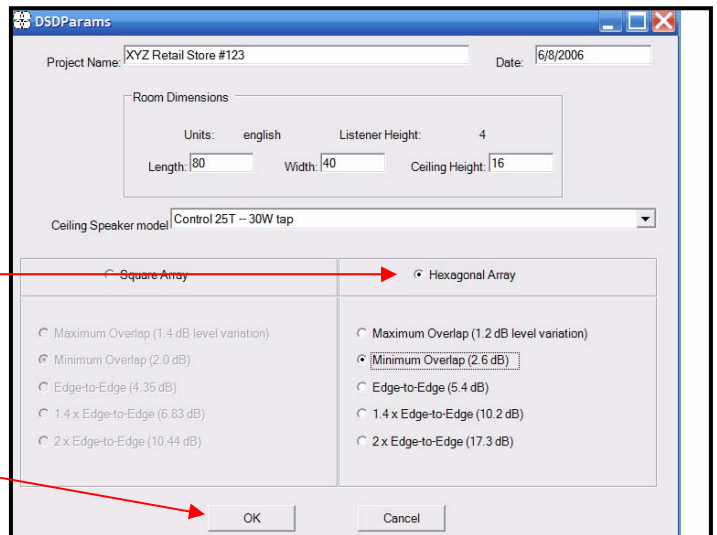
Annotations with red arrows point to various elements:

- Distance from walls to speakers**: i.e. 11.8' from the side wall to the first speaker and 7.2' from the end wall to the first speaker.
- Room dimensions**: Points to the overall room layout.
- Spacing between each speaker**: i.e. 16.4' from speaker to speaker throughout.
- Overall room dimensions summary**: Points to the summary section.
- Speaker count**: Points to the 'Number of Speakers: 10' line.
- Overall output in dB and amplifier recommendations**: Points to the SPL and amplifier power values.
- Speaker spacing summary**: Points to the 'Row Spacing' and 'Column Spacing' values.

At any point you can click on the Revise Design button to go back and make changes or adjustments

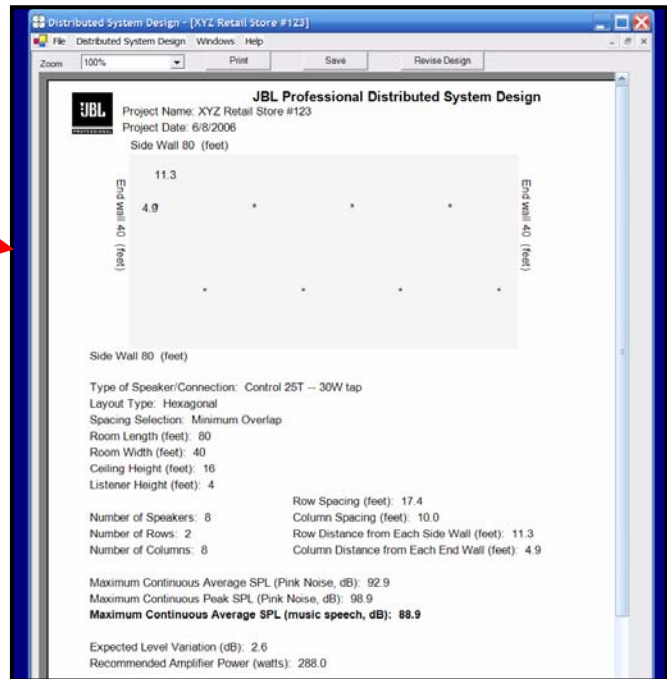


Once you get back to the main layout page, you can make adjustments to the design. For example, you can choose a Hexagonal Array.

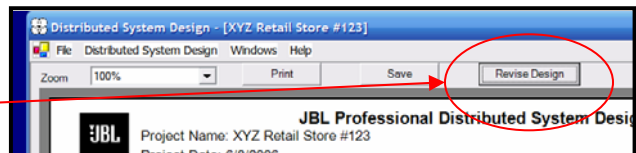


And click OK

For the same design, here is what the Hexagonal layout looks like



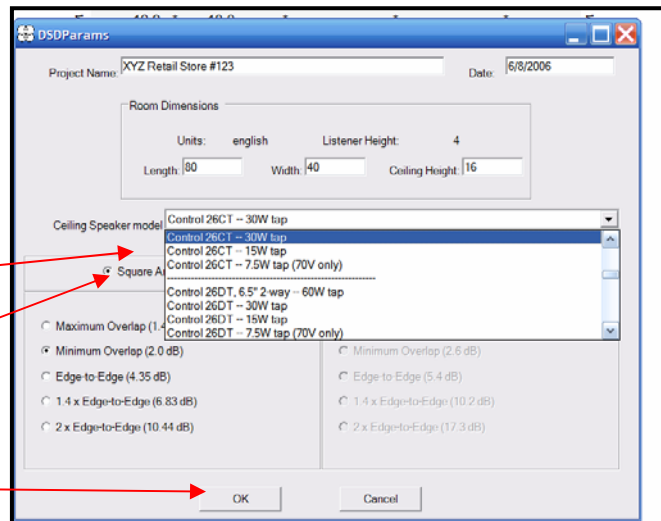
You can also click on the Revise Design button and change the speaker to ceiling mount models



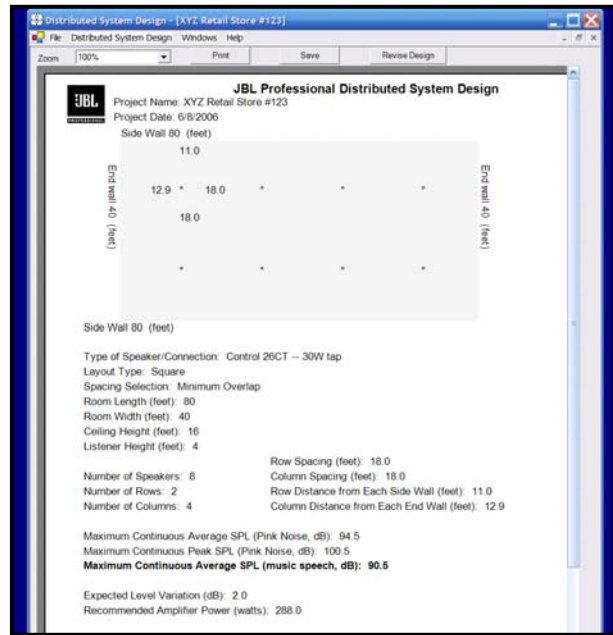
Here we have selected the Control 26CT with a 30W tap

And have gone back to a Square Array

And click OK



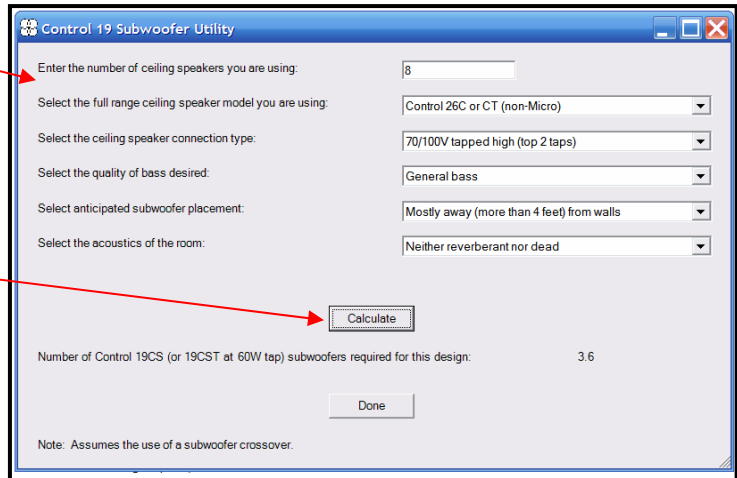
Here would be those results



When you use the ceiling speakers, you have the option of calculating Control 19CS or CST ceiling subwoofers. Click on Distributed System Design and then click Subwoofer Utility



Simply fill out this page and answer the design questions for your application



Then hit Calculate and it will give how many Control 19CS or CST's to use

If you have any questions about using JBL's Distributed System Design that this has not answered for you, please contact JBL Pro Technical Assistance for further assistance. Thanks to Jeff McDonald of Plus Four Marketing for writing this tutorial!