



Adamson Systems Engineering

shooter

quick start guide

v.2.0

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shooter

Introduction

The purpose of this guide is to help new users in their first setup with the Adamson Shooter® predictive software for Adamson Y-Axis and SpekTrix speaker systems. Further detail can be obtained from the Adamson Shooter® User Manual and is recommended for all users. All users should also attend Adamson Certification Training.

Disclaimer

The Adamson Shooter® Software, Shooter® Quick Start Guide and Shooter® User Manual are not meant to instruct the user in safe and standardized rigging methods.

Requirements

1. Microsoft Windows™ compatible computer version '98 or better
2. Internet connection or Shooter® Software CD
3. Measuring device or venue CAD drawings
4. Knowledge of Adamson Y-Axis and/or SpekTrix rigging systems
5. Working knowledge of coordinate geometry

Software Installation

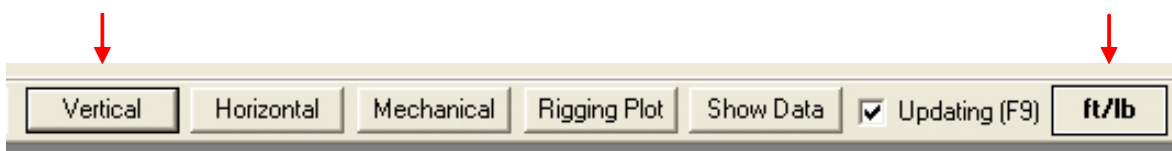
1. Insert Shooter® CD or download Shooter® installation file. Shooter® may be

downloaded at <http://www.adamsonsystems.com/shooter> password: degrees

2. Download file: "Shooter 2.7.1.zip" or higher
3. Unzip the file and Click "Setup.exe" This will launch the installer. Follow the on screen instructions.

Start A New Project

1. Launch the "YAXIS Shooter v 2_7_1" Program
2. Under "File" Choose "Open"
3. Choose "BLANK.yas" and Click "Open"
4. Choose metric or standard measurement system in the top right corner by clicking ft/lb or m/Kg.
5. Click "Vertical View" to view the blank document.



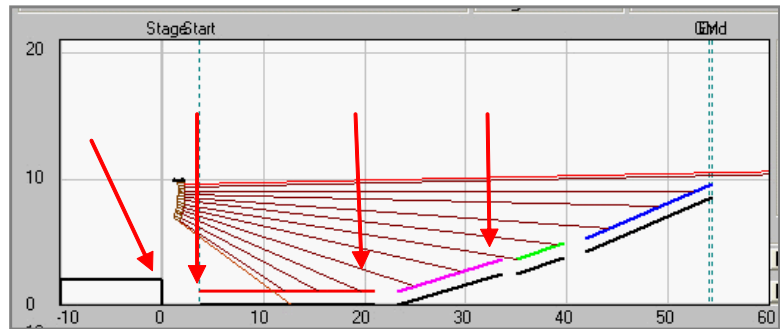
Quick Start guide



Defining The Space

In this graph, column "1" is the floor at the beginning point of section 1 (red), 2 (pink), 3 (green), or 4 (blue), and column "2" is the end point. A section can be an area of audience where the vertical pitch (incline) changes or a balcony is present. Like all CAD software (X) is used for the Horizontal plane and (Z) for the Vertical plane. (X) is always measured from the front of the stage and (Z) from the floor/ground level.

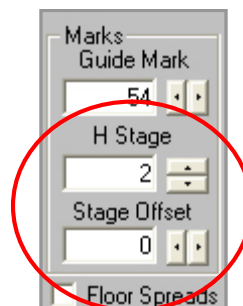
Audience (X=0 Edge of Stage)						
Floor	x	1	z	x	2	z
1	LINK	3.5	0	21	0	Seats
2	LINK	23.2	0	33.5	2.5	Seats
3	LINK	35	2.5	39.6	3.8	Seats
4	LINK	41.8	4.2	54.4	8.5	Seats



1. In section 1 column 1x, place the distance between the front of the stage and the first row of audience.
2. In section 1 column 1z, place the height of the floor. (Usually "0" for the first level)
3. In section 1 column 2x, place the distance between the front of the stage and the last row of audience in this section
4. In section 1 column 2z, place the height of the floor at the last row of audience in this section.
5. To add another standing/seating area (section 2) which is continuous with section 1, press "LINK" (automatically places the end distance of a section for the beginning distance of a new section hence connecting the two), or add it manually to 1x of the pink row.
6. If section 2 has an elevation starting immediately at the front row, such as a balcony, do NOT link these sections, but place the distance value manually and add height value to pink 1z.
7. In section 2 for column 2x, place the distance between the front of the stage and the last row of the second section. For an elevation add the height of the floor at the last row of section 2 to 2z.

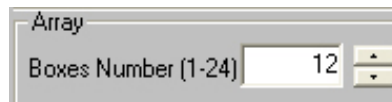
Continue to include all audience sections. One can switch between "Stand" or "Seats" (to adjust the average ear height).

8. Adjust "Stage Height" and "Offset" if desired.



Speaker Selection

The software can determine the ideal quantity of boxes and the location of the rigging frame, for a given space, however practical limitations will need to be determined by the user. The software will make it readily apparent if you do not have enough boxes to cover the audience evenly, especially in the case of vertical coverage.



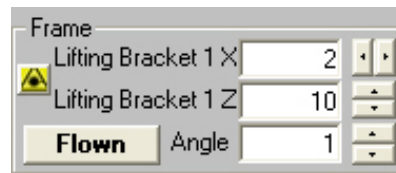
Array
Boxes Number (1-24)

▼	1	▲	-1.2
▼	2	▲	-3.3
▼	2	▲	-5.4
▼	2	▲	-7.5
▼	3	▲	-10.5
▼	4	▲	-14.7
▼	4	▲	-18.9
▼	4	▲	-23.1
▼	5	▲	-28.2

1. Based on the number and model of boxes in stock, enter the quantity you are likely to use per side in the application.
2. Enter the model of boxes you plan to use in the drop down menus. (E.g. Y-10K = Y10's with Kevlar drivers, S8-W = SpekTrix W)

Locating The Rigging Frame

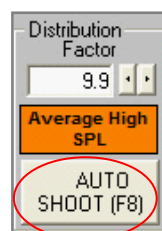
A balance must be found between what is best for sound quality and what is practical for the venue application.



Frame
Lifting Bracket 1 X
Lifting Bracket 1 Z
Flown Angle

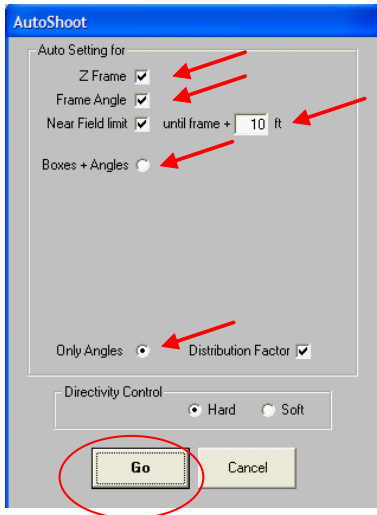
1. Choose either "Flown" or "Stacked"
2. Assess which factors are predetermined by the venue and enter them. For example, the array might need to stay at a certain height for audience line of sight, or the array might need to be a set distance from the front of the stage because of the venue's rigging points.
3. 1X determines distance from stage, 1Z Height of the array.

It is often useful to hit "AUTO SHOOT" at this point, to get a starting height and frame angle.



Distribution Factor

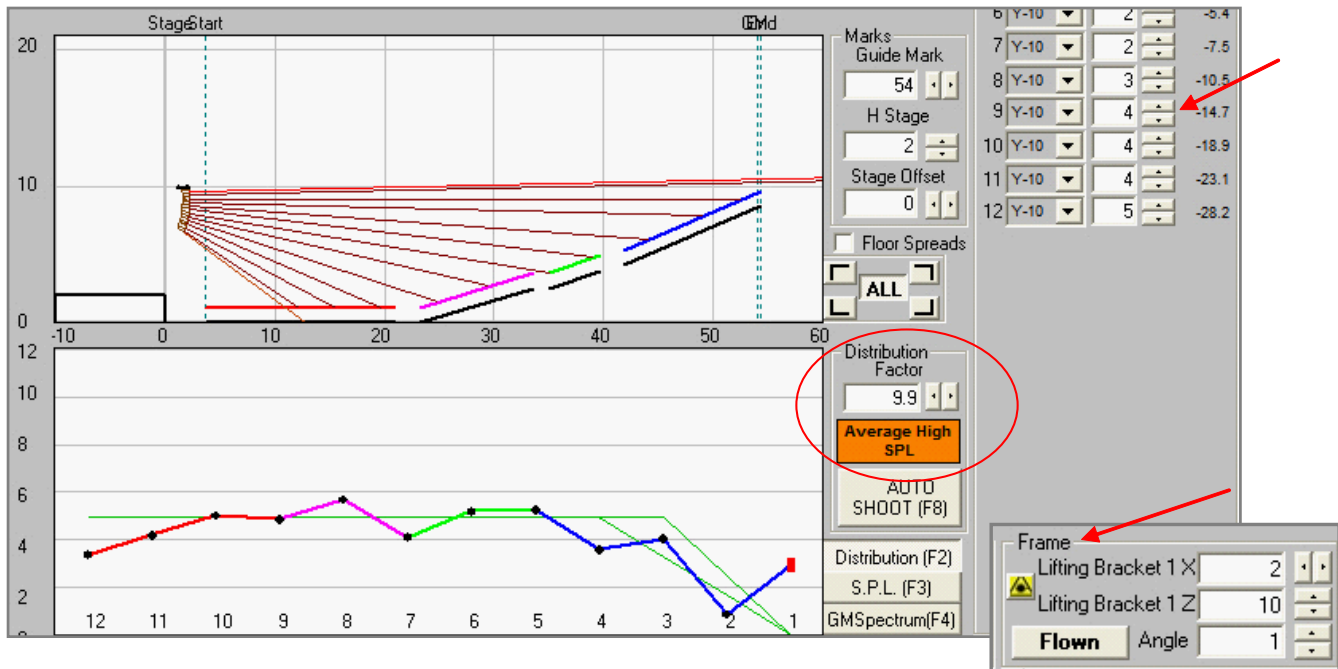
Average High SPL
AUTO SHOOT (F8)



1. Choose "Z Frame" to allow Shooter to choose the optimal height for the rigging frame.
2. Choose "Frame Angle" to allow Shooter to choose the optimal Angle for the rigging frame.
3. Choose "Near Field Limit" to start Shooters calculations at a defined distance from the front of the Audience. Many applications require the use of low power front or down fills.
4. Choose Boxes+Angles if you want Shooter to determine the optimal amount of boxes for the application. Otherwise choose "Only Angles".
5. Press Go.

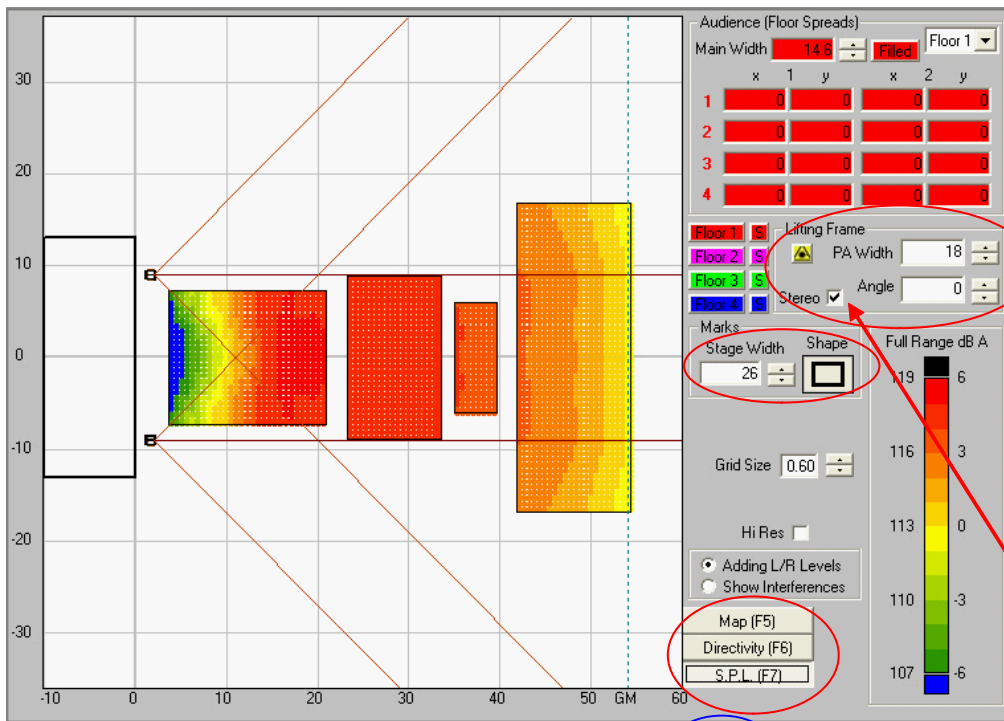
Adjust Frame And Box Angles

Keep in mind that what you are trying to achieve is a practical balance between, speaker placement, vertical coverage, equal SPL between front and rear audience members, and number of boxes to be used.

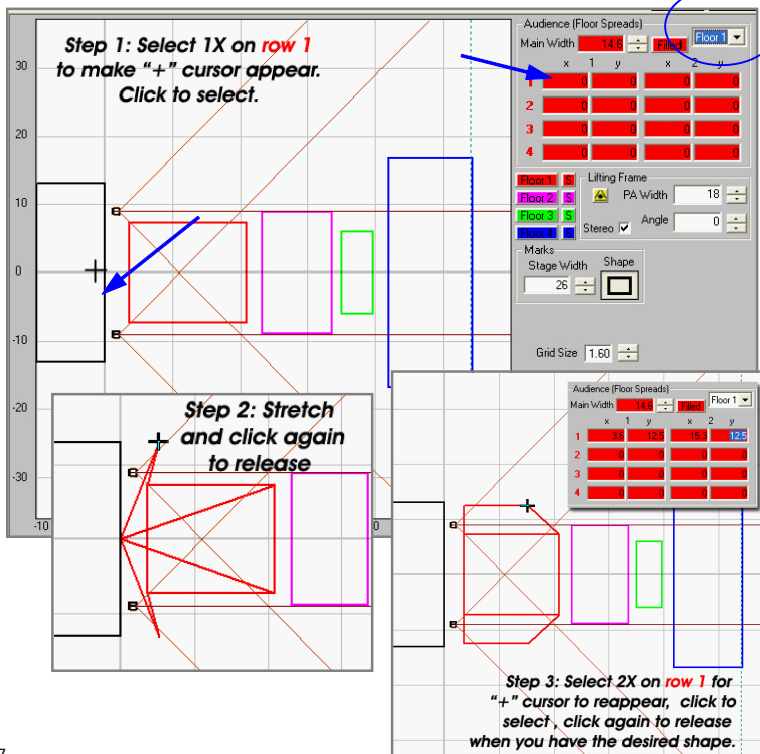


1. Hit S.PL (F3) to see results. To adjust desired SPL level, scale "Distribution Factor" up or down.
2. Vary the angle and height of the rigging Frame and the Angles between boxes to achieve even SPL coverage.

Horizontal View

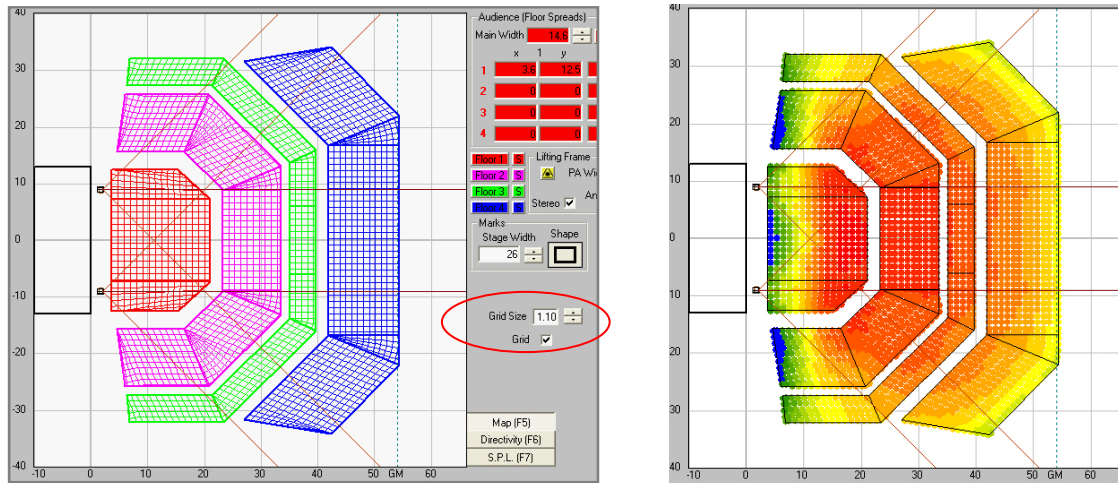


It's useful flip back and forth, between "Vertical" and "Horizontal View"
 -While working, make sure you're in Map Mode (F5), when checking design switch to S.P.L. Mode (F7) to get a feel for the coverage.
 (S.P.L. Mode (F7) re-calculates coverage after every change, thus slowing down the design process)
 -One can also adjust the P.A. system Width and Angle, as well as the Stage Width and Shape in the "Horizontal View". To work on a single rig, (E.g. a "centre cluster") turn off "stereo".



1. For drafting more complex areas select 1X in row 1. a "+" cursor will appear at the front of the stage.
2. "Click" on the "+" and stretch to determine the shape of the first row of the audience. "Click" to release when cursor is in the desired place.
3. Select 2X to determine the shape of the last row of floor level 1.

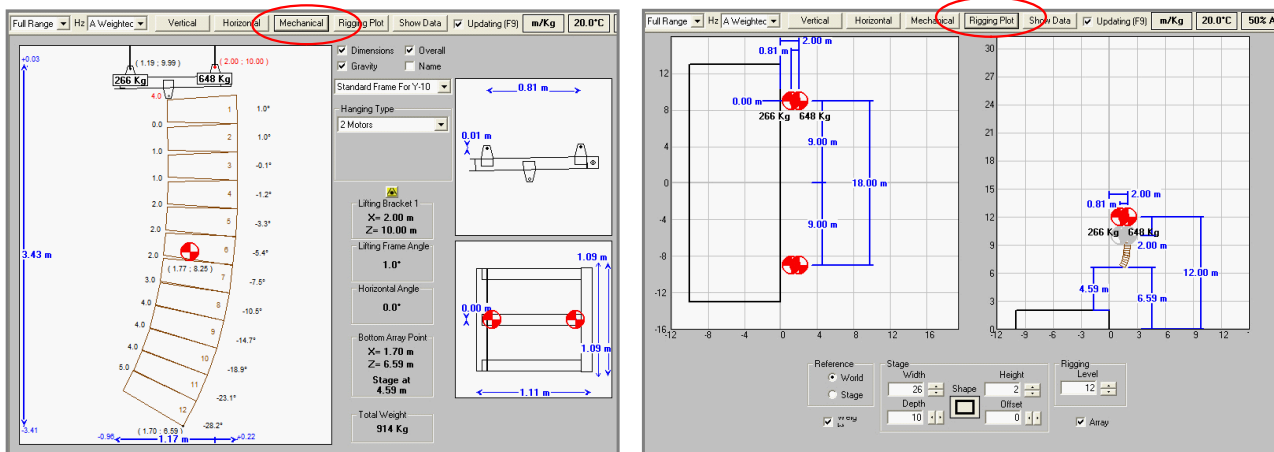
Remember you can also enter values manually. Continue to row 2, 3, 4, if floor level 1 requires more complex shapes. To switch to floor level 2, 3 or 4, use the drop menu on top of the page.



4. Click on "Grid" and adjust grid size. For a more detailed S.P.L. calculation, choose a tighter (smaller) grid size and vice versa, then click S.P.L. (F7) to see the coverage.

Summaries can be obtained by clicking "Mechanical View" for illustrations of the array and rigging frame, "Rigging Plot" for key rigging measurements. Both can be printed out as a "screen shot" and distributed to the rigging crew as a handy reference sheet.

(Press "print Scrn" on your keyboard, "Open" a new project in 'Microsoft Paint', 'Adobe Photoshop', or any other picture manipulation program and paste it for resizing and cropping. You can also paste it into a 'Word' document and print as is.)



For a "Shooter user sheet" with no illustrations go to the "File" menu and click "Print User Sheet".

Keep in mind that Shooter has many more detailed features, not outlined in The Adamson Shooter Quick Guide.

