

Special points of interest:

- Common Array Specification Terms.
- Design Factors.
- Standards Update.
- American Pride.



Tel 310.834.5914
Fax 310.834.3042
www.atmflyware.com

October 2001



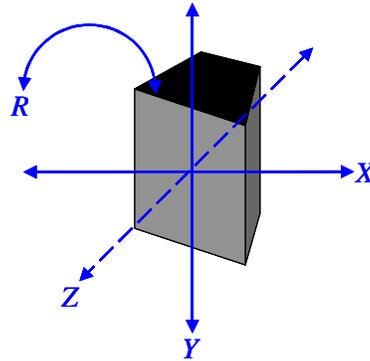
ATM FLY-WARE A DIVISION OF ATM GROUP, INC.

Fly Paper

Angles And Axes Defined

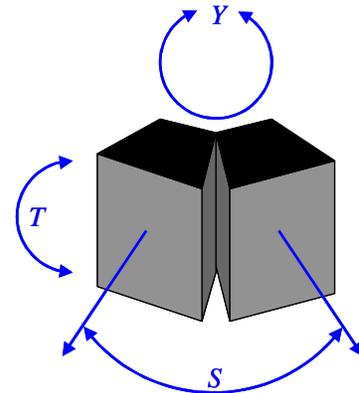
Defining the attitude, orientation, angles, relationship, and/or aim of a loudspeaker array can be difficult. Wouldn't it be nice to have a common set of definitions? Well here they are, straight from the world of manufacturing and programming.

Defining Objects Inside An Array



X = Horizontal Plane
 Y = Vertical Plane
 Z = Proximal Plane
 R = Rotational Plane

Defining The Orientation Of The Array



S = Splay Angle
 T = Tilt Angle
 Y = Yaw Angle

Is the Design Safe? NO, Allow me to explain...

When designing and installing rigging systems, the weakest link in the system dictates the maximum load one can place on the system. By following simple design principles and maintaining an adequate design factor throughout the system, one can be confident that the system will perform as planned.

There is no such thing as a "safe" system, only one that is properly designed for an adequate working load limit. A designer can never possibly anticipate all conditions that may cause system failure, that is why we must never call a rigging system "safe".

Standards Watch

The third public review of BSR E1.8 Entertainment Technology—Loudspeaker Enclosures Intended for Overhead Suspension—Classification, Manufacture and Structural Testing draft standard is now complete, watch for news! A new draft standard for motorized rigging systems, BSR E1.6, is available for public review at www.ETA.org.

Design Factors

The entertainment industry generally accepts the following design factors for predictable materials such as metallic alloys;

| | |
|-----------------------|---------------------------------|
| Mild to Moderate Wear | Moving Wire Rope and Heavy Wear |
| 5:1 | 8:1 |

PROUD AMERICA

I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one nation, under God, indivisible, with liberty and justice for all



Sound & Video Rigging Systems