

GAUSSIAN MELODY

by Ned Kahn

MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION:

Three steel balls fall through an array of pins to produce a random melody. The pin array emulates a Gaussian distribution demonstration where numerous balls are fed at the top of a triangular array of pins, then bounce through the pins to become distributed along the bottom with a Gaussian profile. This distribution is not obvious with just three balls, however the pins are set in at different depths which in conjunction with the erratic path of the balls produce a random melody. The array and sound box are mounted on a pivot to move the balls back to the top of the array.

The pin array has a sound box incorporated in its construction to amplify the sound. The sound box is in turn mounted in the center of a cooking wok to focus to sound towards the operator.

General Cleaning:

The finished or painted surfaces of the exhibit may be cleaned with a mild soap solution or general purpose cleaner. The Plexiglas panels and pin array cover should be cleaned with a plexi cleaner and a soft wipe that will not leave scratches, (we suggest Wype-All™).

Ball & pin replacement:

The Plexiglas cover on the array is held down with six screws. Removing these screws will access the balls and pins. The lowest pins must be at least high enough to prevent the balls from passing over the top of the pin. The highest pins just need to clear the plexi. The pins are a tight fit into the pre-drilled holes and were originally pressed in at three different heights, evenly distributed around the array. The exhibit uses three 5/16" diameter stainless steel ground balls.