## Varikon Box 3x3x3



Patented by D. Kosarek 1974; 2x2x2 version dates back to 1889 . (clear plastic box containing red cubes with blue and white dots, 2.1 inches)
The center cube and the six cubes that are the center of each of the 6 faces form a single central solid "cross", leaving only 19 cubes that can move around this central cross by tilting the box. Like the Varikon Box $2 x 2 x 2$, one must shuffle the cubes so as to have only blue dots touching the faces of the box and three white dots showing in the position with the empty space; the puzzle is pleasant to use (and doesn't require great dexterity to move cubes). There is a little hole in one corner that had a pin inserted into it to prevent the puzzle from being disturbed during shipping.

Jaap's Page gives presents a solution (using a Rubik's cube type notation) that solves the bottom two layers and then solves the top layer by repeatedly exchanging cubes as needed.
This is the same puzzle as Inversion, and similar to the Vadasz Cage $3 \times 3 \times 3$, a smaller version of Peter's Black Hole, and Mad Marbles. Here are some other versions:


White with red/blue dots. (2.1 inches)


White with red/green dots.
(2.1 inches)


Blue with red/white dots.
(2.1 inches)

## Further reading:

Jaap's Page, from: http://www.geocities.com/jaapsch/puzzles/varikon3.htm
Rice Patent, from: www.uspto.gov - patent no. 416,344
Coe Patent, from: www.uspto.gov - patent no. 785,665
Sinden Patent, from: www.uspto.gov - patent no. 3,841,638
Kosarek Patent, from: www.uspto.gov - patent no. 3,845,959
Postasy DE Patent, from: www.epo.org - patent no. DE3,027,556.

