Mirage

Directions

Kinetic Sculpture by
David C. Roy
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To the Owner:

Hello,

Welcome to the world of Wood That Works. This Mirage is number out of a possible 150 pieces. It was made by me during the month of in 1990. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Mirage has been my full time occupation for more than 14 years. I hope Mirage brings you and other viewers as much enjoyment as I've found in making it.

Mirage has been mounted on a wall in my shop and running for at least 2 complete windings (several hours) before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem free for years to come. I use only the finest materials.

It leaves me happy and satisfied to find that my work has made its way into new lives. I hope it brings you years of enjoyment.

David C. Roy

About Mirage:

Mirage is a sculpture that wasn't supposed to be, at least not this year. I already had 4 new sculptures designed and was supposed to be constructing them when the idea for this type of patterning wheel struck. The concept of spokes connected to an outside hexagonal rim and seemingly free of the hub so intrigued me that I had to explore it. I did a series of animated sketches on the computer to see what the patterning would be like. When that proved promising, I moved to the shop for a "reality" check. (Sometimes ideas that look great in my head and on the computer screen just don't make it in the shop.) This time both reality and the computer checked out.

The mechanism in this piece is also new. In other patterning pieces such as Marionette and Mirage, the "arms" directly drive the patterning wheels. In this piece, the "arms" drive an intermediary arrangement of pulleys and weighted wooden balls which in turn drive the patterning wheels. This prolongs the motion of the wheels in a single direction and lengthens patterning interval. The resulting effect is an interesting composition with a visually riveting kaleidoscopic patterning wheel.

Specifications:

Limited Edition of 150  
Size: 30"h x 25"w x 5"d  
Ball drops 25" below sculpture  
Power Source: negator spring  
Approximate Run Time: 3 hours  
Materials: hardwood plywood, brass, bearings, string  
Mirage © 1989  
Patent No. 4637152
Directions:

To Mount on Wall:
- **DO NOT** remove the tape holding the strings in place.
- Hold the mounting template in the desired location against a wall. The diagram shows the relationship of the template to the sculpture to guide you in positioning the sculpture on the wall. The minimum clearance dimensions are shown at the edges of the template.
- Level the bottom edge of the template.
- Place a sharp instrument through the screw holes, marking their positions on the wall.
- Drill pilot holes. If the wall is sheetrock or plaster use plastic anchors.
- Screw the top part of the sculpture to the wall.
- Screw the bottom part of the sculpture to the wall.

To Place Strings:
- Remove the tape holding the arm strings in place on the spool in the center of the slot wheel assembly.
- Unwind the front ball string completely from around the front slotted wheel and allow it to rest on or near the floor. (It depends on how high the sculpture is mounted.)
- Unwind the rear ball string and wooden ball from its cardboard holder and hold it in one hand.
- Turn the slotted wheel assembly clockwise until the rear arm nearly touches the rear slot wheel.
- Arrange the rear ball and string so that the string pulls straight up from the rear slotted wheel. (See diagram at right.) Wrap (from left to right) the rear ball string and wooden ball up and over the rear V shaped pulley attached to the back of the rear patterning wheel. Line the string up so that it lays in the slot of the right hand side of the rear slot wheel.
- The sculpture should now be oriented as is shown in the diagram to the right. The rear ball string is pulling straight up and out of the rear slot wheel, the rear arm nearly touching the rear slot wheel, and the front arm pointing down as shown. The front ball string is hanging down from the left side of it's slot wheel but is not wrapped around it.

*Note: This diagram shows the sculpture only partially strung.*
Directions: (continued)

- Now wrap the front ball string two complete turns counter-clockwise around the front slot wheel, then bring the remaining string up and over the V slot pulley on the front of the forward patterning wheel. Place the string from left to right over the pulley so that it crosses over itself. Bring the string back down to the slot in the left hand side of the front slot wheel.
- When the slot wheel assembly is turned all the way clockwise the sculpture should be oriented as shown in the diagram at the right. That is, rear arm nearly touching the rear slot wheel, front arm pointing toward about 5 o'clock, rear ball hanging about 30 inches below sculpture and front ball hanging just below the front slot wheel.

To Wind
- Turn the drive pulley wheel counter-clockwise 20 turns

To Start
- If Mirage does not start immediately after winding, gently turn the slot wheel 1/4 turn.

To move or repack the sculpture
- Turn the slot wheel all the way to the left and tape the arm strings directly to their respective slot wheels. Undo the front and rear ball strings from over the upper assembly and wrap them separately to prevent tangling.
About The Artist:

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started "Wood That Works" and I became a full time sculptor. Since then I have designed and handcrafted over 60 different limited edition and one of a kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural eastern Connecticut.