## About the Artist:

David C. Roy

Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemis   try to further my under-standing 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 80 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 northeastern Connecticut.

Wood that Works

Variation-Stars • Directions

Kinetic Sculpture by David C. Roy
©2003
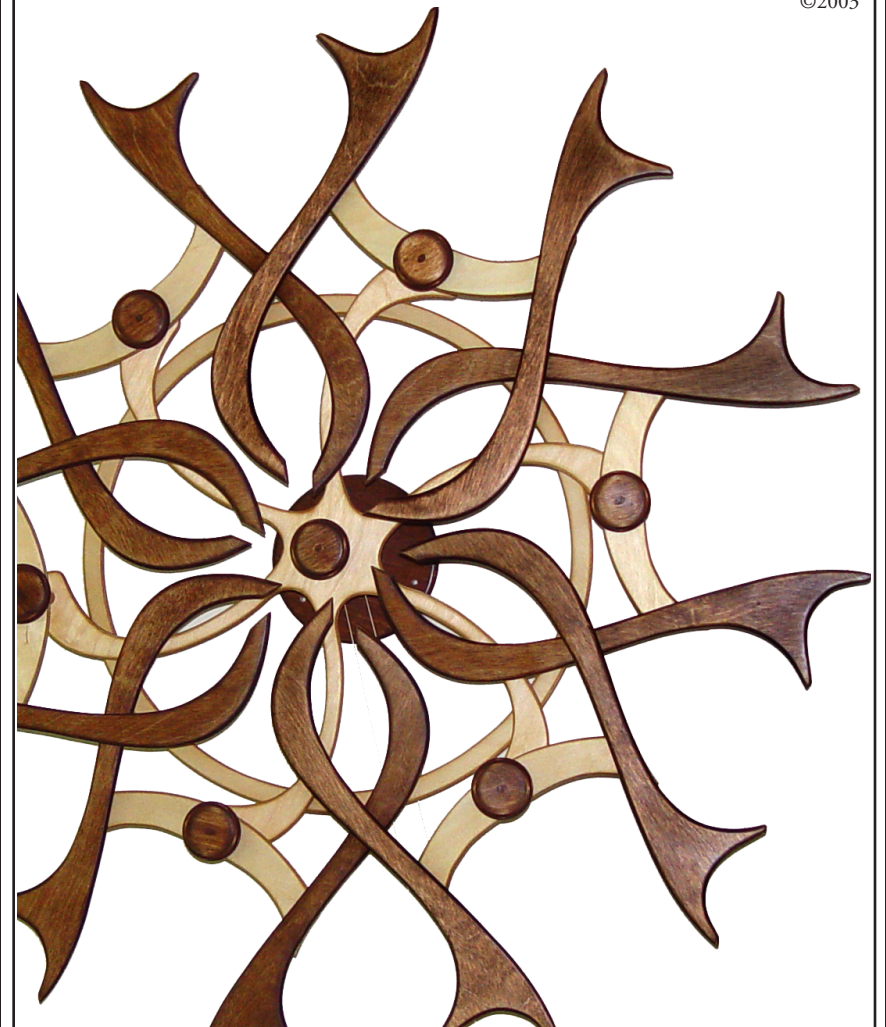
To the Owner...

Hello,

Welcome to the world of Wood That Works. This Varia-tion-Stars is number _____ out of a possible 6 pieces. It was made by me during the month of _____ in 2004. 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 Variation-Stars has been my full time occupation for more than 25 years. I hope Variation-Stars brings you and other viewers as much enjoyment as I've found in making it.

Variation-Stars has been mounted on a wall in my shop and running for at least 10 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. Of course, problems can still occur no matter how hard I try to prevent them. My answer to this is a lifetime warranty against defects in materials and workmanship. If the sculpture fails to work properly at some time in the future for some reason other than misuse or calamity, I will repair it free of charge. The sculpture needs to be returned to me post paid.

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

David C. Roy

Patterning wheels

Tape

Winding wheels

Tape

Arms
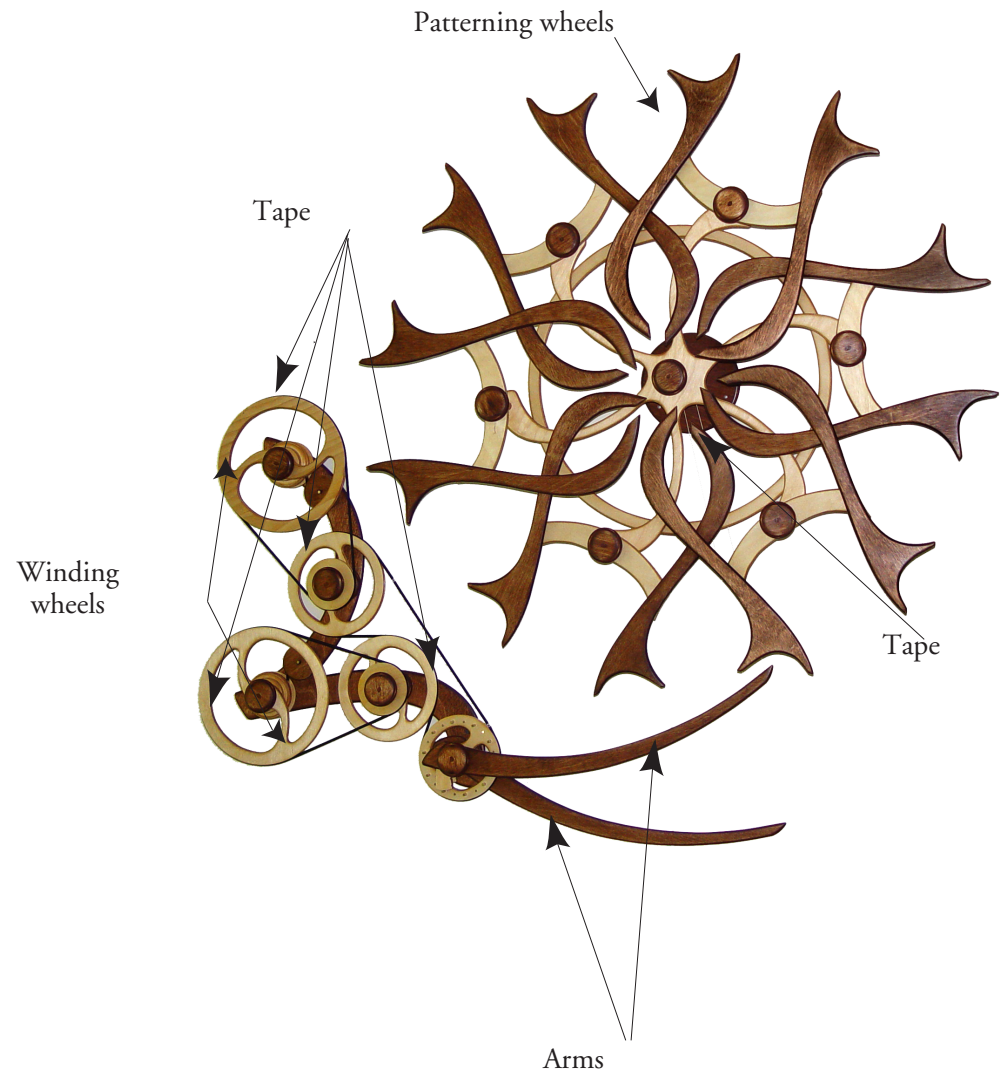
Directions:

Before Moving Sculpture:
- Always tape the spring-belts and strings in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again.
- See the diagram for the best tape locations.

Correct Installation of the Spring-Belts:
- Three spring-belts power and control the motion of this sculpture. It is easy to reinstall the small belts if they become knocked loose during shipping or installation. The longer belt takes a more involved path and can be a challenge to reinstall without the proper directions.
- Spring-belts tend to have minds of their own and it sometimes helps to have an extra pair of hands to install the long one.
- The long belt passes behind the smaller ones. The first step is to remove the small ones so they are out of the way. Refer to the diagram at the right and remove the small belts by popping them out of the pulley slot. Make sure you hold the drive wheel and release any stored spring tension slowly.
- Install the long belt following the pattern show in the diagram to the right. This can be frustrating and another set of hands is very helpful.
- Reinstall the short drive belts.

About Variation-Star

The Variation series is the result of my continued exploration in the world of the kinetic pattering created by 6 overlapping wheels that orbit a common center. Each orbiting form is designed to hold a particular orientation by rotating in the opposite direction from its orbital motion. I first "discovered" this kaleidoscopic effect in my sculpture called Rhapsody and took it a step further with Quark Cotillion. This time around I've found 3 different kaleidoscopic patterns that excite me and remind me of various elements of nature.

I'm going to produce this sculpture as a series with a common mechanism but different kaleidoscopic patterning wheels. The series will start with 3 different designs, Variation-Wind, Variation-Stars and Variation-Fire. Each sculpture in the series will be individually numbered 1-6.

Variation-Stars was named because of the small rotating star-like patterns that form and dissolve near the center of patterning and then combine into the large 6 pointed star when the entire wheel is orientated properly.

Specifications:

Limited Edition of 6
Size: 50"h x 52"w x 7"d
Power Source: negator spring
Approximate Run Time: 16 hours
Materials: hardwood plywood,
 bearings, string
Variation-Wind ©2003

Directions:

To Mount on Wall:

- DO NOT remove the tape holding the spring-belts in place.
- Hold the left-hand template against the wall in the desired location.
- Level the bottom edge.
- Temporarily attach the template to the wall using the marked screw holes in the template. Partially screw in the screws.
- Hold the right-hand side template against the left one lining up the bottom edges. Mark the screw holes.
- Remove the left-hand side template from the wall.
- Install wall anchors if necessary.
- Screw the left hand side of the sculpture to the wall using the marked holes. Be careful not to dislodge the black belts from the pulleys.
- Screw the right hand side of the sculpture to the wall using the marked holes.
- Attach the inner string hanging from the right-hand side of the sculpture to the arm closest to the wall. Place the string under the screw eye closest to the end of the arm and then loop the end of the string over the other screw eye.
- Attach the outer string to the outer arm in the same manner.
- Remove the tape holding the strings to the upper mechanism.
- Remove the tape holding the spring-belts in place.

To Wind:

- Turn the upper winding wheel counter-clockwise 24 turns. Turn the lower winding wheel clockwise 24 turns.

To Start:

- If the sculpture does not start by itself after winding, gently push down on the arm that is in the uppermost position.

15"

4"

3"

Winding
wheels

Arms