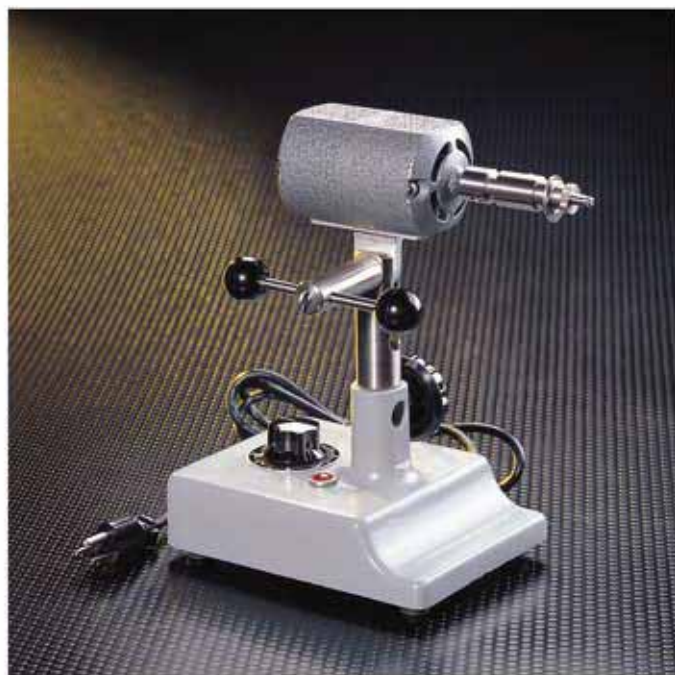


## UNIVERSAL ROTATOR CATALOG ER-6A & ER-6B

Electric rotators, such as the WINSKO Universal Rotator, are used in many and diverse applications in the classroom. For instance, they are often used to rotate custom-printed discs (WINSKO RA-21) that will give a variety of interesting optical illusions when rotated in the flashing light of a stroboscope (WINSKO E-77A & E-77B). Or, they can be used with an eccentric drive mechanism to vibrate a length of string to show standing waves. They can also be paired with many accessories, all requiring a rotator, including Newton's Color Wheel, the Adjustable Color Wheel (WINSKO RA-17), the Siren Disk, Watt's Governor (WINSKO RA-25), Centrifugal Hoop (WINSKO RA-10) and Centrifugal Force Apparatus. There is even a V-groove on the chuck that will allow you to use an O-ring type belt to drive other rotating devices. The WINSKO Universal Electric Rotator is available in two models: the ER-6A (115 volts), and the ER-6B (230 volts). For WINSKO Universal Rotator accessories, please visit us at [www.winsco.com](http://www.winsco.com).

**UNPACKING AND INSPECTION:** Immediately upon receiving the Rotator, carefully unpack and inspect for any damage which may have occurred in transit. If any signs of damage are noted, file a claim at once with the carrier. Save all the packing materials so that they can be inspected by the carrier's representative, if necessary. If the shipment came to you by United Parcel Service (UPS) or FedEx, notify the shipper at once, as they must handle the claim for you. Please note, it is still imperative that all packing materials be retained for inspection with these carriers as well. You may remove and discard the twistee and the small section of tubing that is used to keep the mandrel from hitting the base during shipment.

**SETTING UP FOR OPERATION:** When you are ready to use the rotator, adjust the motor mounts to an appropriate position and lock them securely. This means the locking screw for vertical adjustment and the knob that locks the azimuth position. Check to see that both locking screws on the chuck are tight. Mount your attachments or accessories before plugging in the line cord. Turn the mandrel by hand to be sure everything is moving freely before applying power. Connect the unit to the correct voltage source and turn to low speed. If everything is running smoothly, gradually adjust the potentiometer to the desired speed.



**GENERAL USE & MAINTENANCE:** The Rotator chuck should fit snugly on the motor shaft. Of course, it can be removed for good reason, but we suggest that it not be done unless absolutely necessary.

There are two customized internal diameter washers on the mandrel to assist in the mounting of various discs. The collar on the mandrel is the correct diameter to center the set of ten WINSKO Stroboscope Discs (RA-21). One or more washers should be used between the mounted disc and the serrated thumb nut. Also, the small hole in the tip of the mandrel will allow you to tie on a piece of light string. When connected to a swivel, you can establish standing waves. The groove in the pulley, together with an O-ring type belt, can be used for light-duty driving of other rotating devices. For this to be successful, you must clamp the base of the rotator to the table, or at least have a solid barrier against the rotator base so that it cannot move toward the driven mechanism (clamp not included).

As your rotator ages, the oil in the sleeve bearings may dry out and become sticky, keeping the motor from running at full speed until the bearings warm up. There is a very small oil hole at either end of the motor, over the bearings, about 2mm in diameter. With a needle oiler (from your local hardware store), apply 2-3 drops of light oil to each bearing when performance becomes sluggish.