Step 1: Installing

Use 20-gauge three-wire rotator cable (not included) to connect the Drive Motor to the control. The instructions in the following two sections include specific references to this RadioShack rotator cable. It has a silver-colored ground (or neutral) wire, while the cable’s other two wires are copper. If you use another brand of cable to connect your antenna rotator, one of the three wires in the cable should be different in some way—this is the ground (or neutral) wire.

Preliminary Testing

Test your antenna rotator before mounting outdoors.

• In your home, temporarily connect the Drive Motor to the control; see steps below.
• Synchronize and test the antenna rotator; see next column.

Wiring the Drive Motor

1. Use a screwdriver to remove the screw from the Drive Motor’s cover and open the cover.
2. Separate the cable’s three wires to about 1 1/2 inches (3.8 cm) down the cable and strip off about 1/2 inch (1.3 cm) of insulation from each wire.
3. Remove the cable grommet from the housing, then insert the cable’s three wires through the grommet.
4. Loosen the three terminal screws, then connect the silver-colored ground wire to Terminal 1, the center wire (copper) to Terminal 2, and the third wire (copper) to Terminal 3.
5. Check the wiring order, then tighten all three terminal screws.

Synchronizing and Testing

1. After you wire the Drive Motor to the Control Box, plug the power cord into a standard AC outlet.
2. Turn the Rotator Dial fully clockwise. The red dot on the Rotator Dial slowly moves clockwise and the top of the Drive Motor turns. When the rotator reaches the end of rotation, the top of the Drive Motor stops turning, the Control Box’s motor turns off, and the dot stops moving.

Note: Depending on the original setting of the Drive Motor, it might stop turning before the motor turns off. If this happens, wait for the red dot to stop moving before you proceed to Step 3.

3. Turn the Rotator Dial fully counterclockwise. The red dot on the Rotator Dial slowly moves counterclockwise and the top of the Drive Motor turns. When the control’s motor turns off and the dot stops moving, the control and the Drive Motor are synchronized.

Set the Rotator Dial to N (north) to align the two arrows on the side of the Drive Motor.

Note: If the arrows do not align, try Steps 2 and 3 again. If the Drive Motor’s arrows still do not align when you set the control’s dial to N, take the Antenna Rotator to your local RadioShack store for assistance.

4. Disconnect the rotator cable from the Control Box so that you can mount the Drive Motor.
Important Safety Instructions

Your antenna rotor, consisting of a control and a drive, has been engineered and manufactured to provide years of reliable service. However, because of the high voltage or the antenna control is installed, it can result in potential electrical shock hazards. In order to avoid such hazards, observe the following basic rules for its installation, use, and servicing:

1. An outdoor antenna system should not be located in the vicinity of overhead power lines or other sources of high voltage, or where it can fall into such power lines or other sources of high voltage. When such a system is located near any such sources, it should be guarded so as to provide some protection against voltage surges and built-up static charges.

2. If the drive unit is installed on an outdoor antenna, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) states that: "arrangements should be made to provide the grounding to the antenna support structure by either bonding the antenna support structure to the antenna discharge unit or by connecting the antenna support structure to the grounding system of the property."

3. Your control is provided with ventilation openings to allow heat generated during operation to be released. If these openings are blocked, heat build-up can cause failure of the control and external damage. Therefore:
   - Never block the ventilation slots by placing the control on a soft surface, such as a bed, sofa, or rug.
   - Never use the control on a bed, sofa, or rug.
   - Never place your control in a built-in enclosure unless proper ventilation is provided.
   - Never place your control near or over a radiator or heat register.
   - Never place your control in a metal cabinet without proper ventilation.

4. To prevent the control from being accidentally plugged into an electrical outlet, always remember to unplug the control before cleaning it. Use a slightly damp (not wet) cloth. Do not use any cleansers on the control.

5. Never expose your control to rain or water. If it becomes damp or wet, or if liquids are spilled into it, disconnect it from the electrical outlet and have the control checked before further use. Liquids, rain, or excessive moisture may cause electrical shorts which can result in a fire hazard.

6. If the drive unit is installed on an outdoor antenna, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) states that: "arrangements should be made to provide the grounding to the antenna support structure by either bonding the antenna support structure to the antenna discharge unit or by connecting the antenna support structure to the grounding system of the property."

7. Never expose your control to heat. Never place a lamp or any other heat-producing device on or near your control. Exposure to heat can cause electrical failure.

8. Always treat your control with care. Do not expose it to ice or snow. Exposing the control to these conditions can result in electrical shorts which can result in a fire hazard.

9. Always store your control when not in use. If the control is left unattended for an extended period of time, store it in a cool, dry, and ventilated location.

10. Always store your control when not in use. If the control is left unattended for an extended period of time, store it in a cool, dry, and ventilated location.

11. Whenever the rotator exhibits a distinct change in performance, unplug the control and call your dealer or service technician.

12. Any attempt to disassemble the control or drive portions of the rotator may expose you to high voltage or other hazards. Observe all cautionary labels, warnings, and instructions.

13. Your control is provided with ventilation openings to allow heat generated during operation to be released. If these openings are blocked, heat build-up can cause failure of the control and external damage. Therefore:
   - Never block the ventilation slots by placing the control on a soft surface, such as a bed, sofa, or rug.
   - Never use the control on a bed, sofa, or rug.
   - Never place your control in a built-in enclosure unless proper ventilation is provided.
   - Never place your control near or over a radiator or heat register.
   - Never place your control in a metal cabinet without proper ventilation.

14. When replacement parts are required, have the service technician verify that the replacement parts have the same safety characteristics as the original parts. Unauthorized substitutions may impair the safety characteristics of the control.

15. Upon completion of any service or repairs to the rotator, please ask the service technician to perform routine safety checks to determine that the rotator is in a safe operating condition.

16. For added protection of the control during a lightning storm or when the control is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna or drive system from any other electrical source. If the control is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna or drive system from any other electrical source.

17. Always use extreme caution when installing a rotator antenna and drive system to avoid electrical shock. Wear rubber-soled shoes and use a sturdy ladder. Do not use the control or drive system on a windy day or when the roof is wet or covered with ice or snow.

Step 2: Preparing the Antenna Mast

To install your Antenna Rotor outside, you need two separate mast: a support mast for the Drive Motor and an antenna mast for the antenna itself. The support mast can be whatever length you choose, but the antenna mast must be at least 12 inches (0.3 m) from the bottom of the mast.

Step 3: Mounting the Drive Motor

You can Drive Motor on a support mast 1½ to 1¾ inches (2.9 to 4.4 cm) in diameter. If the mast is over 5 feet long, we recommend using guy wires to secure the mast.

Step 4: Mounting the Antenna

To mount the antenna, cut a hole in the mast at the desired location. Insert the antenna mast into the hole and secure it with a clamp.

Step 5: Routing the Cables

Make a generous loop near the Drive Motor to allow full rotation of the antenna.

Step 6: Operation

To rotate the antenna, turn the control’s dial to the desired direction. When the antenna reaches the selected direction, it stops.

Note: The control is designed to be used with our rotator only. Unauthorized substitutions may result in a risk of fire or electric shock, or other hazards.

Do More With Your Antenna Rotor

Visit your local RadioShack store or radioshack.com to purchase these and other useful products.

100-Ft. Rotator Control Cable

• Conductor rotator cable easily connects your antenna rotator to your control box.
• Color-coded

40" Boom Length, 17 Elements Outdoor Antenna for UHF-Only

• Ideal for fringe areas or when UHF and VHFs are in different directions

3½” Wood Screw Standoffs with Insulators 4-Pack

• Wood screw standoffs with insulators for twin-
lead or coaxial TV cable