

# Antenna Rotator Model G-450XL

Use the following chart to calculate configurations for tower-mounted antennas:

Antenna Type	Rotation Radius	Weight	Antenna K Coefficient	Wind Loading Area (in m <sup>2</sup> )
50M 5 el	2.5 m (98.4 inches)	7 kg (15.4 lbs) (mast: 2.5kg, or 5.5 lbs)*	17.5	0.3
21M 3 el	4.2 m (165.4 inches)	10 kg (22 lbs) (mast: 2.5 kg, or 5.5 lbs)*	42	0.45
		TOTAL	59.5	0.75

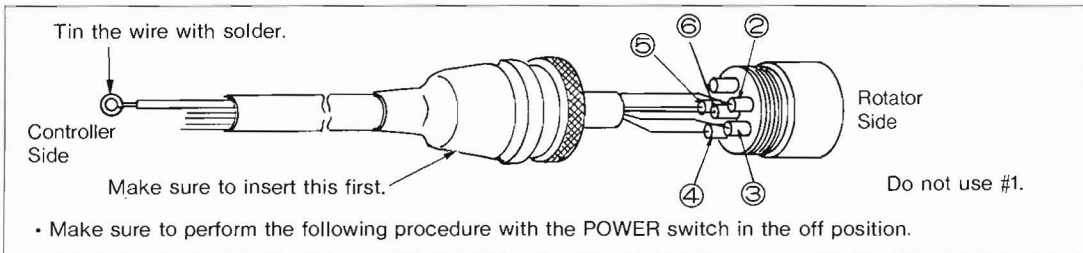
\* Mast weight of 5kg (11 lbs) is divided equally between the two calculations.

## 6. Installing and Adjusting

- 1) Use 5-conductor (or 6-conductor) cable with a diameter of 0.5mm (#24 AWG). Only use as much cable as you need.

**NOTE:** If the cable exceeds 40m (131ft) in length, increase the diameter to 0.75mm (#22 AWG).

- 2) Assemble the cable according to the following diagram:



- 3) Connect the round plug to the rotator, and attach the other end to the Rotator Control Cable Jack on the controller, making sure to match the numbers on the pins (use only pins #2 to #6).
- 4) Check the power switch with the cable in this state. Insert the power plug in the wall socket, and turn the POWER switch on. The pilot lamp should light, and the direction indicator will rotate until it reaches the current direction of the rotator.
- 5) Press the LEFT switch on the controller to turn the rotator counterclockwise. It will stop automatically. Confirm that the needle of the direction indicator rests exactly on the 0° (N) position. If there is needle error, loosen the screw in the center of the indicator and adjust the needle to 0°.
- 6) Look at the rotator, choosing a point from which to mark its rotation.
- 7) Next, press the RIGHT switch on the controller to turn the rotator 360° in a clockwise direction, watching the point on the rotator that you chose in step #6. Make sure that the rotator returns to the correct position. Also watch the needle on the direction indicator, checking that it returns exactly to the 0° (N) position. If it does not align correctly, adjust the ADJ potentiometer on the rear panel of the controller. Furthermore, ensure the OVERLAP indicator LED lights up when the rotator near the end of its 360° rotation (If it does not light up, adjust the potentiometer (VR1) on the printed circuit board in the controller).