

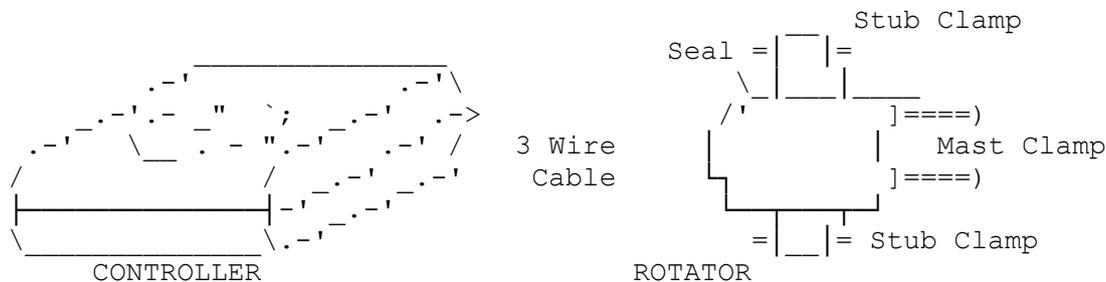
Rotator Hishmann Hit Ro 250 info

By G8MNY

(New Jan 15)

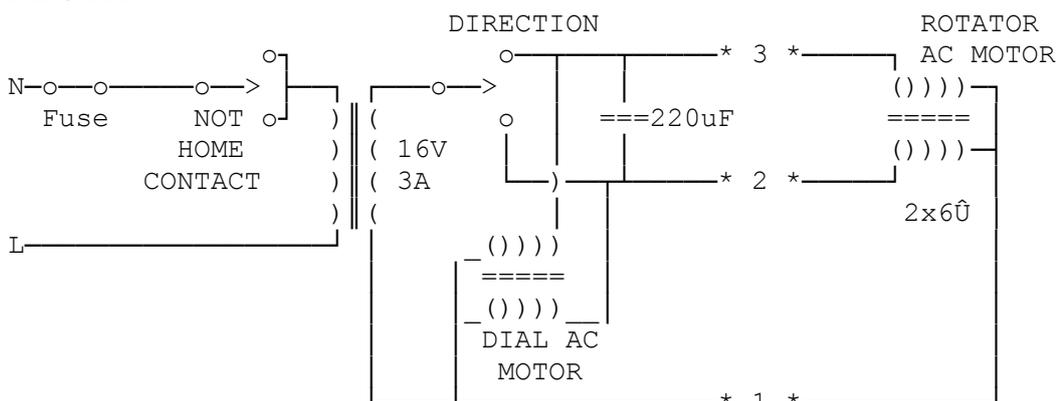
(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

This is similar, but a simpler version of the Radio Shack offset rotator. This one has no speed feedback electronics or pulsed cams etc!



It uses 2 identical split phase AC squirrel cage motors, 1 in the rotator & 1 in the controller. In the controller as manual set friction dial is above motor driven movable switch plate with 2 normally off changeover switches. The motor runs until it agrees with the manually dial. The mains is fed via a flexible lead to an off home mains contact & another lead with the secondary voltage to a changeover to set the motor direction.

DIAGRAM



\* = External Connection

The series AC capacitor gives a 90° leading voltage into either of the windings determining the direction of both motors. In the controller a chain of gears turns the switch plate. In the rotator 1 gear & a worm drive gives the same gear ratio to the well greased up stub mast champ tube from the motor. Both motors need regular servicing to move grease around & stop rusting in the outside rotator etc.

CALIBRATION

As the 2 motors AC are in different temperatures environments & with different mechanical loads, they will go out of sync, To calibrate both they have to be run into their mechanical stops at one or other end, to give time for the unstopped one to catch up. They are both swinging stops to give a full 360°. Calibration should not be done often (once/10mins?) as 1 motor will be in a stalled high current state for a while!

Why Don't U send an interesting Bul?

73 de John G8MNY @ GB7CIP