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RT-21 Find Divide Ratio

Determines Pulse Divisor for Unknown Divide Ratio

Here are two options to use the controller to count and calculate the correct ratio. Method 2 is not quite as accurate as method 1, but should yield results that are better than .5 degree end-to-end accuracy.

We start with a large known ratio setting of 30/degree and that we know is way too high.

STEPS - METHOD 1

1. Ensure the system can rotate 360 degrees CW from its current position, if not turn it CCW enough so it can. Mark or line up a reference direction. that you can return to as close as possible.

2. In the controller SETUP. Make the OFFSET 0 and divide ratio to 10,800, Save, then go back into SETUP and change the CALIBRATE to 0 and SAVE. The large display should say 000.0 or 000.1

3. Turn CW with the buttons until the system has turned through exactly 360 degrees back to your reference mark. You can go back and forth with the buttons until you get it right on.

4. DIVIDE RATIO = **10,800 - 30(360 - DIsplay Reading)**

METHOD 2 - Use if you can get an accurate reference point for a 180 degree turn. This is not as accurate, but faster if there's an antenna installed.

1. Ensure the system can rotate **180** degrees CW from it's current position, if not turn it CCW enough so it can. Mark or line up a reference direction. that you can get to that's exactly **180** degrees rotation

2. In the controller SETUP. Make the OFFSET 0 and divide ratio to 10,800, Save, then go back into SETUP and change the CALIBRATE to 0 and SAVE. The large display should say 000.0 or 000.1

3. Turn CW with the buttons until the system has turned through exactly **180** degrees to your reference mark. You can go back and forth with the buttons until you get it right on.

4. DIVIDE RATIO = **10,800 - 60(180 - DIsplay Reading)**

Ensure that you set the OFFSET back to desired setting, enter the correct Divisor as determined, then set the Calibration. Watch your coax loops until you're sure that everything is operating correctly.