

MI-250 PEC TRAINING

Set up your scope and polar align as usual. Use a quality cross hair or bulls eye illuminated reticule. Orient the cross hair in the North-South, East-West position. Orient yourself to the motion of the hand control buttons. If necessary, use the reverse buttons on the top of the hand control to change the orientation of the hand control buttons. In other words, as you are using the hand control, the North button activates a North movement, South button activates a South movement, etc.

The period of the MI-250Go-To worm is 4 minutes. That means it takes 4 minutes to make one revolution. The Periodic Error will complete a full cycle in that 4 minutes. Normally, the drift will move to one side (East or West) for about 1.5 to 2 minutes and the drift back to the opposite side for 1.5 to 2.0 minutes. The only drift we are interested in is the East-West drift. Ignore the North-South drift.

Before training the PEC it is important that you just sit there and watch the drift. We want to find the "center point" of the drift. That is the point where the drift is transitioning from East to West or vice versa. It may take a couple of worm periods to visually accomplish this.

Use your watch or clock to time the drift. You will see that the period is very periodic from East to West or from West to East.

When you are sure of the center point, start your timer and the PEC training cycle. You must understand that no matter what you see, the corrections need only be in one direction for the first 1.5 to 2 minutes. For example, if the star is drifting West for the first 1.5-2.0 minutes, only make corrections for that direction, **NOT THE OPPOSITE DIRECTION, no matter what you see in the eyepiece. Movement in the opposite direction will be due to atmospheric scintillation, not Periodic Error.** The real trick is to resist making corrections to the wrong side. When the star finally drifts to the other side, do the same: only make corrections to that side. The above procedure will aid in very precise PEC training. **We do not recommend the use of an auto guider for training because it does not know the difference between Periodic Error and Atmospheric Changes.**

The Gemini PEC training cycle will stop blinking at the end of one worm period (4 minutes).

Good guiding!

Mountain Instruments

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