

PolarAlign Version 1.0.0.0 - by George Varros (updated January 30, 2009)

Overview - PolarAlign is a Windows based application that helps with polar alignment.

Requirements: Runs on Windows XP based computers with “.NET 2.0 or 3.0” installed. It has not been tested on Vista or Windows 7 but is expected to work.

Your computer should have the correct time zone identified. PolarAlign obtains the Universal Time (UT) from the system, in order to calculate the position of Polaris. The time can be manually entered if it cannot be correctly derived from your system settings.

PolarAlign only works in the northern hemisphere but may include the southern hemisphere in a later version.

Installation: PolarAlign resides in a zip file which has a directory structure similar to this: `\Deploy_PolarAlign\Application Files\PolarAlign_1_0_0_0`

Directory contents:

`\Deploy_PolarAlign\` contains setup.exe and PolarAlign_Instructions.PDF

`\Deploy_PolarAlign\Application Files\PolarAlign_1_0_0_0\` contains the PolarAlign.exe executable file and associated files.

Unzip the file to a directory.

Next, you can either run `\Deploy_PolarAlign\setup.exe` to install PolarAlign or simply run the executable file:

`\Deploy_PolarAlign\Application Files\PolarAlign_1_0_0_0\PolarAlign.exe`

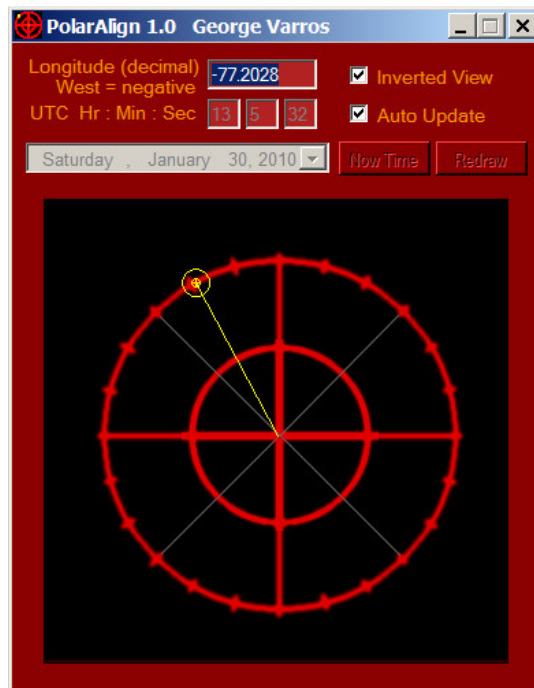


Figure 1 – PolarAlign screen

Quick start guide:

Run the application. On startup, the Universal time will be read from the system and displayed in the time fields.

Longitude - Enter your longitude in decimal format into the longitude text box. If you are located east of zero degrees longitude, enter your longitude as a normal number and if you are west of zero degrees, enter the longitude as a negative number; e.g.: I live in Maryland at approximately -77.2028 West so my longitude is entered as -77.2028

UTC Hr: Min: Sec - This holds the Universal Time that Polaris' position is calculated by, which is based also on the date seen on the Calendar, and the longitude.

Inverted View - Check the "Inverted View" check-box to match the inverted view through a polar alignment scope.

Auto Update - Check the "Auto Update" check-box to update the time and refresh the position of Polaris, every second. Once per second is really too often but, what the heck, that's the way I wrote it. Maybe I will change it to once every minute.

Now Time - Click the "Now Time" button to obtain the current Universal date and time. This will refresh the position of Polaris.

Redraw - If you have edited the time or date, refresh the screen by clicking the "Redraw" button.

Calendar - The calendar reflects the current date based on the Universal Time (and date) queried from your system, unless you change it. It can be used to manually change the 'current date' that PolarAlign is using. After changing the date, click the "Redraw" button to refresh the screen.

Testing - The application was tuned using Cartes du Ciel and Starry Night Backyard which are in good agreement.