

POLE FINDER

This handy device will allow the user to rapidly and efficiently align an equatorial telescope mount. Accuracy will be enhanced if the mount is equipped with a finder scope fitted with a cross hair reticle mounted coaxially in the polar axis or alongside a fixed portion of the mount; for instance a fork arm. By using the device with care, the user should achieve polar alignment suitable for visual use or guided photography. For long-duration photography, further alignment accuracy using the drift method may be required. The device can also be used to determine the local times of upper and lower culmination and eastern or western elongation of Polaris, or even local sidereal time. Instructions for use are included on the back of the device.

No guarantee of any degree of success is implied as user results will vary depending on the care with which the individual used the device or performs his own polar alignment.

License

Permission to duplicate this device is granted the recipient of this file or images derived from it for non-commercial purposes under the condition that the image containing the instructions for use and copyright mark be duly reproduced and attached to the back of the device as described in the assembly instructions below. If the recipient would like further permission for commercial production and higher quality camera-ready images more suitable for that use, he may contact the author at jsstars@worldnet.att.net

Assembly Instructions

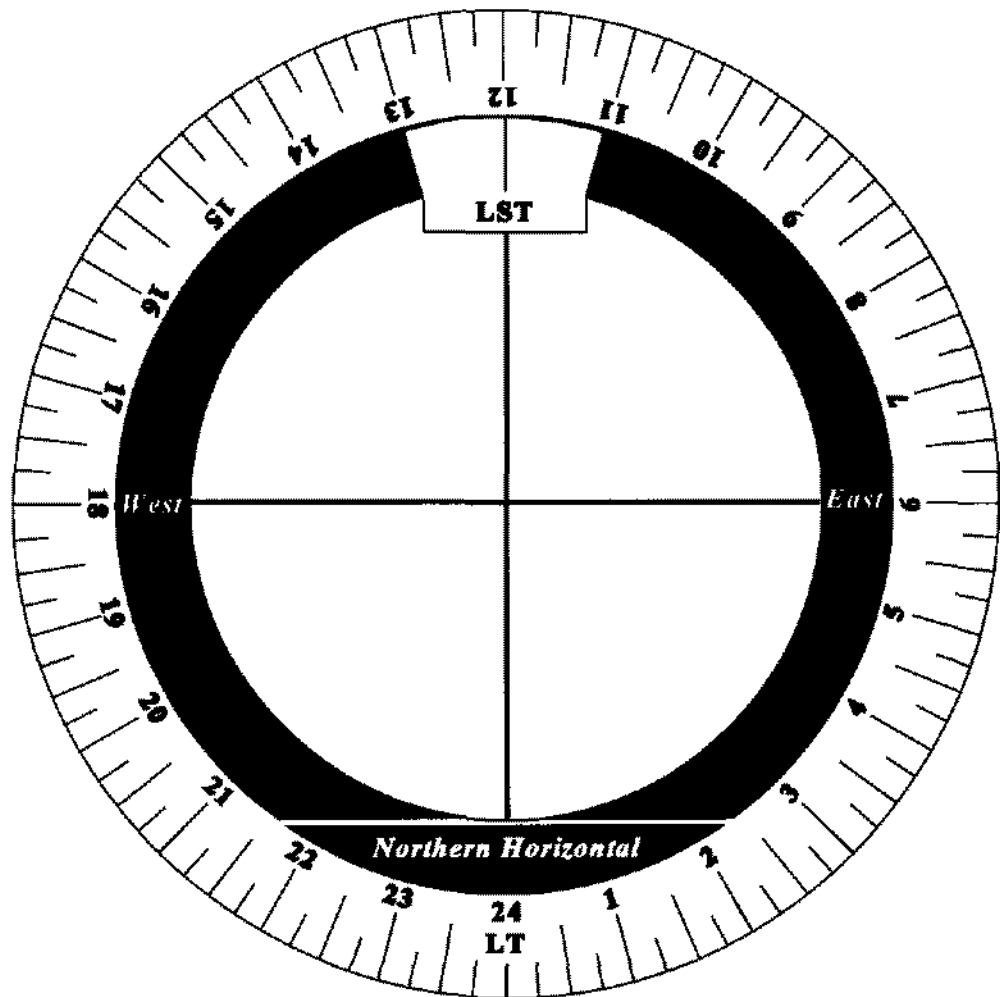
This PDF file provides images of the device's parts of sufficient quality to assemble a workable device. The first image below representing the 24 hour LT circle and horizon line must be printed on transparent media. The second image with the circle representing the months of the year should be printed on opaque media. The third image containing the instructions for use should also be printed on opaque media. A more durable device will be obtained if the images are printed on thick material.

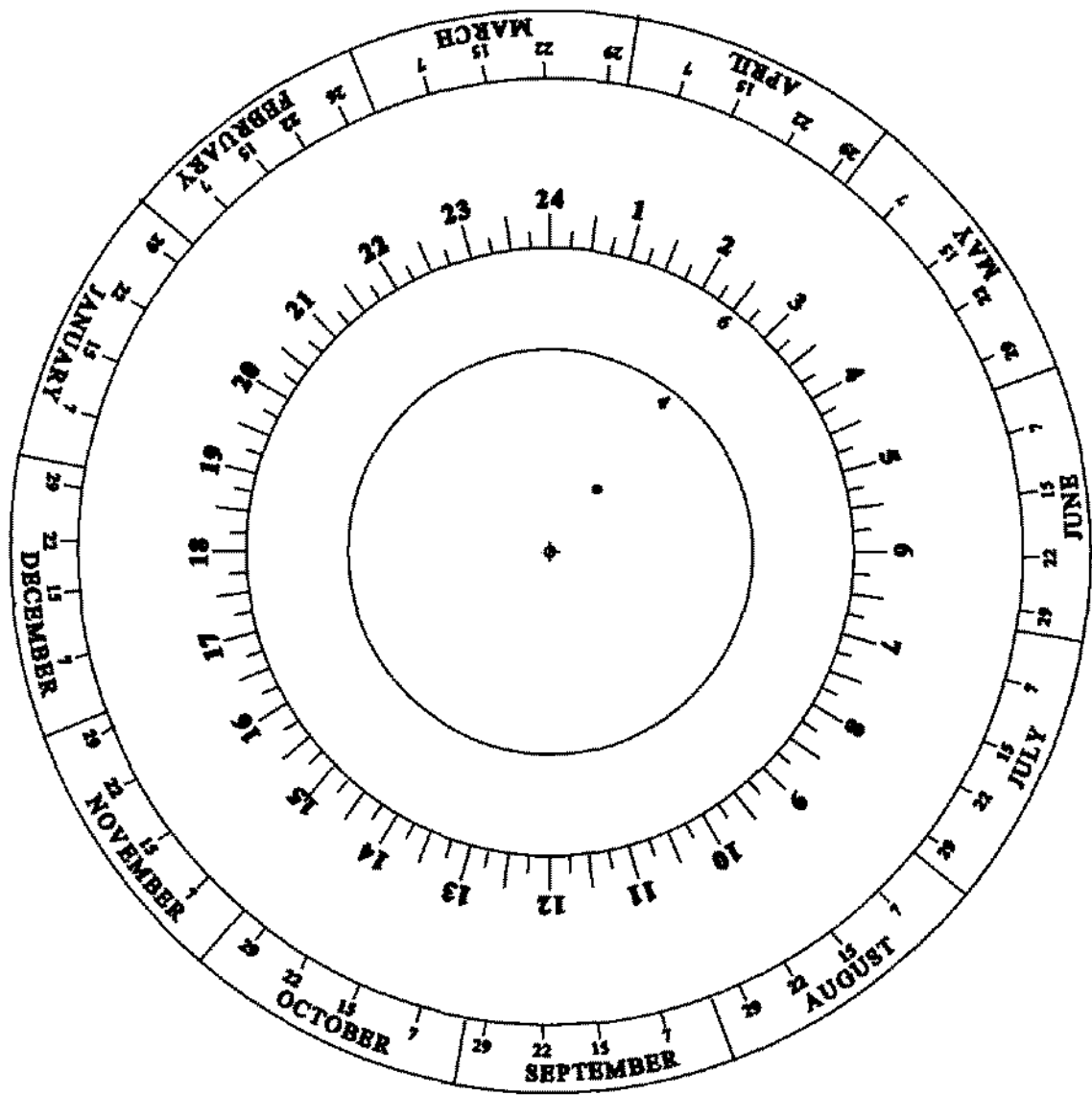
After printing, use scissors to carefully cut each image from the media along the outer peripheral line. Turn the third image containing the instructions around and place it back-to-back with the second image containing the months circle. They can be taped or glued together.

Using either clear plastic laminate or even clear shipping tape, cover both sides of each of the two disks with a clear water-repellant layer. This will serve not only to protect your work but to make the device more robust and durable.

Place the 24 hour LT disk on top of the other disk and carefully center them with each other, then stick a pin through the center of the cross line to make small alignment holes. At this point you can permanently join the disks with a rivet or even a machine screw. For best results use an eyelet brad.

When complete, follow the instructions on the back and enjoy!







Jim's
POLE FINDER

*A Handy Aid for
Rapid Polar Alignment of Equatorial Telescopes*

*** Useful in all Northern Latitudes ***

INSTRUCTIONS: The central pivot of the Instrument, and the cross-lines in the window, represent the north polar point. *Polaris*, the north star, is represented by the single spot, and the window's central numbered circles depict the edges of 4 and 6 degree fields of view.

To find the current apparent position of *Polaris* in relation to the north pole and the northern horizon, simply  align the current local time on the LT dial with the current day of the  year found on the outer dial. The standard time shown on your clock or watch is fine for this, though accuracy is lost with increasing distance from a standard meridian. **Subtract** one hour from the time shown on your watch if you are currently using **Daylight Saving Time**. Assuming the crosshairs in your polar finder scope are parallel with the horizon, it is a simple task to transpose the view in the window to the view in the finder scope to effect polar alignment.

Local siderial time is read directly from the small window labeled **LST**. Times of upper, lower, eastern, and western elongations of *Polaris* for any day of the year can be determined simply by setting it's spot under the corresponding crossline.

© 1999 Jim Sapp Made in USA