

Getting Started in Astronomy: A Resource Guide

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Astronomy is a very rewarding hobby that can be enjoyed on several levels. Without any optical aid, for example, you can view the aurora borealis, lunar eclipses, meteor showers, artificial satellites, and the seasonal variations of the constellations. A pair of binoculars is an excellent tool with which to become familiar with the constellations and the more prominent sights in the heavens. If you develop a passion to discover even more of the wondrous celestial objects in the universe, then the time will have arrived for you to invest in a well-made reflector or refractor telescope.

But where do you turn to get started? The information provided in the following pages is meant to help. The first section titled "Astronomy Basics," lists suggested book titles to acquaint you with the stars and the hobby in general. The section, "Binocular Astronomy," follows this. In it you will find observing resources to help you make the most of this important astronomical instrument. The next section, "Equipment Resource Guide," briefly describes a very useful reference to aid in the selection of binoculars and telescopes. And finally, for those with access to the World Wide Web, a selected listing of interesting web sites is provided.

Astronomy Basics

To help you get started in the right direction of the exciting and rewarding hobby of astronomy, we have compiled a selection of suggested magazines and books. Some of the book titles listed below may be available at your local bookstore.

- **Astronomy Magazine**, Kalmbach Publishing, P.O. Box 1612, Waukesha, WI 53187-1612, Phone: (800)-533-6644

- **Sky & Telescope Magazine**, Sky Publishing Corporation, 49 Bay State Road, P.O. Box 9111, Belmont, MA. 02478-9111. Phone: (617) 864-7360

- **Exploring the Night Sky : The Equinox Astronomy Guide for Beginners**, by Terence Dickinson, published by Firefly Books (ISBN 0920656668)

This book is geared towards children between the ages of 4 and 8. It won the New York Academy of Sciences Children's Science Book Award in 1987.

- **Nightwatch: A Practical Guide to Viewing the Universe**, by Terence Dickinson, published by Firefly Books (ISBN 1552093026)

This is a handbook for the beginning astronomer. Topics include light pollution, how to choose binoculars and telescopes, how to pronounce the names of stars and constellations, and more. The star charts are very useful for getting acquainted with the constellations and some of the more prominent objects within them.

- **The Stars: A New Way to See Them**, by H. A. Rey, published by Houghton-Mifflin Co. (ISBN 0395081211)

Written by the author of the children's book **Curious George**, it gives a clear, vivid description of the constellations throughout the year.

- **Skywatching (Nature Company Guide)**, by David H. Levy, published by Time-Life (ISBN 078354751X)

Aimed at readers of high school age and up. It is an informative book with lots of practical information.

- **The Great Atlas of the Stars**, by Serge Brunier, Firefly Books; ISBN: 1552096106, available through Sky Publishing Corp., 49 Bay State Road, Cambridge, MA 02138, (800) 253-0245

This book uses breathtaking photographs to highlight 30 of the more prominent constellations in the sky. Overlays help you to locate specific celestial objects in each constellation.

Observational Resources for Binoculars

A well-made pair of binoculars will significantly increase your access to the celestial jewels strewn about the stars. And with your newfound knowledge of the constellations, you will quickly gain an appreciation of the versatility of this important astronomical instrument. Listed below are some suggested resources to help you make the most of your observational gear.

- **Touring the Universe through Binoculars: A Complete Astronomer's Guidebook**, Philip Harrington, published by John Wiley & Sons, ISBN 0471513377

This is a very useful guide to the many astronomical objects within the grasp of binoculars. The book starts out by describing observations of the Moon and planets. It then goes through and lists out each constellation and the interesting sights contained within them. Gives important advice on selecting a good quality pair of binoculars.

- **Burnham's Celestial Handbook, volumes 1-3**, by Robert Burnham, Jr., published by Dover books

A meticulously written work which details the celestial sights found in the heavens. The three volume series covers each constellation individually, listing out variable and multiple stars, star clusters, galaxies and more. Although many of the objects are beyond the capabilities of binoculars, those that are described in the above reference to Harrington's binocular guidebook can be found here. The additional background information on star and constellation lore makes this a very informative series.

- **Tirion's Sky Atlas 2000**, 2nd Edition, by Wil Tirion, published by Sky Publishing Corp., 49 Bay State Road, Cambridge, MA 02138, (800) 253-0245

An excellent collection of star charts which will prove indispensable to navigating your way through the celestial heavens as you search out astronomical sights of interest with your binoculars. It will also prove useful to telescope owners. See www.skyandtelescope.com

- **Orion DeepMap 600 Star Chart**, by Wil Tirion, published by Orion Telescopes and Binoculars, PO Box 1815, Santa Cruz, CA 95061. 800-676-1343.

A road map style guide to 600 of the best telescopic and binocular objects visible from the Northern Hemisphere. Excellent for beginners, and useful for the more advanced observer.

Equipment Resource Guide

Before running out to buy any astronomical observing aides, you may find the following resource to be of considerable use:

- **Star Ware: The Amateur Astronomer's Ultimate Guide to Choosing, Buying, and Using Telescopes and Accessories**, by Philip Harrington, published by John Wiley & Sons (ISBN 0471183113)

This is a very useful book which will help you make informed decisions on the purchase of binoculars, telescopes, and various accessories.

Astronomy Resources on the Web

This section lists some of the many interesting web sites related to astronomy. Many of them have links to other useful sites.

An Atlas of the Universe

www.anzwers.org/free/universe/index.html

American Assn. of Variable Star Observers

www.aavso.org

Artificial Satellite Predictions

www.heavens-above.com

Astronomy Magazine

www.astronomy.com

Astronomy News

science.msfc.nasa.gov/Astronomy.htm

The Aurora Page

www.geo.mtu.edu/weather/aurora

Catching the Light Astrophotography

www.astropix.com/HTML/I_ASTROP/TOC_AP.HTM

Center for Astrophysics

hea-www.harvard.edu/looking_up.html

Comets and Meteor Showers

comets.amsmeteors.org

International Dark Sky Organization

www.darksky.org

NASA's Comet Observation Page

encke.jpl.nasa.gov

NASA Eclipse Home Page

sunearth.gsfc.nasa.gov/eclipse/eclipse.html

Skyhound

www.skyhound.com/sh/skyhound.html

Sky Publishing Corporation

www.skyandtelescope.com

Space Weather

www.spaceweather.com

The Telescope Review Web Site

www.scopereviews.com