







Planetarium Projector

Web Code: STAT1143
Web Code: SPSAS1143

Discover the Universe!

Welcome to the amazing world of astronomy! Astronomers spend their time discovering the nature of space and everything in it. As big as our planet Earth is, it is just one of eight planets orbiting the sun, which is just one of billions of stars in our home galaxy, the Milky Way, which is just one of billions of galaxies in the universe. So you can see that it will be a long, long time, if ever, until astronomers run out of things to discover!

Your Own Planetarium

Your planetarium allows you to...

- Project stars, outlines of the constellations, and their names on the walls and ceiling all around you
- Project the night sky of any season or month of the year with its one-piece fully-integrated Star Sphere
- · Accurately project the night sky by season, date and hour
- Project the night sky in its correct directional orientation
- Treat yourself and your friends to an exciting sight and sound tour of the night sky.

What Is a Constellation?

If you look at the stars in the night sky long enough, you will notice how groups of stars form familiar objects, something like connect-the-dots pictures. Many centuries ago, people who gazed at the stars noticed pictures out there— and gave names to them. This helped them create a "map" of the night sky, making it easier to locate the stars.

But these figures are not really sitting out there in space. They are only imaginary patterns created by the relative positions of the stars as we see them from Earth. Some stars that appear to be right next to each other are in fact very far apart. They just look close together from where we are looking at them. If you could somehow see the night sky from another part of the galaxy, the relative positions of the stars would be completely different and you would be able to discover totally new constellations.

The Star Sphere

The Star Sphere™ is a replica in miniature of the largest and brightest objects in









space surrounding our planet. If you were to imagine Earth inside the sphere, it would be located at the exact center, where the light bulb is. The dots printed on the sphere represent stars. The lines connecting the stars show the constellations.

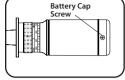
Planetarium Operation

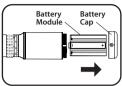
The Star Sphere is powered by three 3 AAA/LR03 batteries.

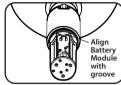
Tool required - Small Phillips-head screwdriver 💮

Installing Batteries for the Light Wand









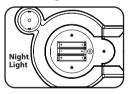
1. First remove the horizon ring and then remove light wand from base.

- 2. With a small
 Phillips-head
 screwdriver,
 remove the screw
 on the battery cap.
 Unscrew battery cap
 located at the end
 of wand. Gently
 shake the wand so
 that the battery
 module slides out.
- 3. Insert three (3) AA batteries into battery module, making sure the "+" and "-" ends are in correct placement as indicated. Alkaline batteries are recommended.
- 4. Insert battery module into light wand, making sure the grooves align (see Fig. 4). Replace battery cap and Phillips head screw (do not overtighten). Place the light wand back into base.

Operating Your Planetarium

- Place planetarium on a table in the center of the room. A room with smooth, light-colored walls and ceiling works best. A room that is roughly square and no larger than 12 x 12 feet provides the best projection quality. Star Theater works best when it is located two to six feet from the projection surface.
- Date selector is located on the light wand. To set your planetarium for the beginning of the audio tour, rotate light wand until "AUTUMN" lines up with

Installing Batteries for the Night Light



 Turn planetarium on its side and, using a small Phillips-head screwdriver, remove the battery cover.



 Insert three (3) "AAA" batteries. Make sure the "+" and "-" ends are inserted correctly, as indicated. Replace battery cover.

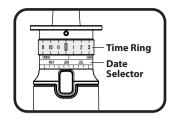
- pointer on the base. (The month and date settings and the time ring will be used after the audio tour to set your planetarium for a specific date and time of day.)
- 3. In a darkened room, turn on projection lamp. (Do not look directly at the Star Sphere while its light is on, or you will lose your darkness adaptation.)

CAUTION: Do not look directly into the light source.

Setting the Date and Time

You can set your planetarium to project the night sky for any date and hour. Here is how:

1. Setting the date: With projection lamp off, turn light wand until the month you want lines up with the pointer on date selector. Below the month, there are markings indicating the 1st, 10th and 20th of the month. Turn light wand to the left until the date you want lines up with the



pointer. For example, if you want to project the night sky the way it is on July 4th, first select July, then turn further to the left, to just past the mark for the first day of the month.

2. Setting the time: Once you have selected the month and date, rotate the time ring—without turning the light wand—so that the time at which the sun sets lines up with the pointer. (The time at sunset can be found in the local newspaper or on the Internet.) Now turn the light wand to the exact time you want. (Note: The months and dates will change on the date selector as you select the time; once you've selected the date and set the time ring for sunset, the time selection function takes over.) You can set your planetarium to project the stars for any time of the night. You can even see what stars are up during the day, when they are not visible.

The Moving Sky

The horizon ring is an important part of your planetarium. It divides the sky into two halves, the visible and the nonvisible. In the course of 24 hours, all of the objects visible from a given location on Earth seem to rise in the east and set in the west.

Your planetarium projects stars that are visible from the northern hemisphere. To see all the stars that are visible from the northern hemisphere, slowly rotate the light wand to the left (westward) while the projection lamp is on. Do you notice that some stars around Polaris never set while some of the stars that can be seen from the southern hemisphere (at the opposite pole of the Star Sphere from Polaris) never rise in the northern hemisphere?

Stellarium Astronomy Program

The Stellarium Astronomy program lets you explore the cosmos in great detail. You can view the night sky for any time—past, present or future—and from any point on Earth. You can see the constellations and their names and you can locate the positions of stars, nebulas, planets, and their moons.

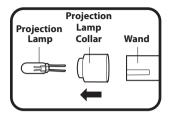
Follow the set-up instructions on the screen. The software is compatible with either PC or Mac. System requirements: Windows XP or Mac OS X with at least 500 MHz processor, 128 MB RAM and 500 MB of hard disk space . Minimum recommended monitor resolutions is 1024 x 768 pixels. (Note: Software is not currently compatible with Windows Vista or Macs using Intel Processors.)

Care and Maintenance

Remove batteries when not in use for extended periods. Keep Star Sphere clean with a soft cloth and quality anti-static cleaner/polish. Never use abrasive cleaners.

Bulb replacement: Replacement bulbs are available at most electronics retailers. Halogen bulb, Voltage: 3.6 V, Current: 500 – 600 mA. Part No. LR00001.

- 1. Remove Star Sphere and light wand from base.
- Push a paper clip into the small hole directly above the on/off button. At the same time, rotate light wand counterclockwise to Star Sphere. Remove it from Star Sphere.
- Push a paper clip into this hole to release Star Sphere



- 3. Carefully pull old projection lamp out of tip of light wand.
- 4. Insert replacement bulb into tip of light wand. (Important: Be careful not to bend prongs of the bulb.) Switch light wand on to make sure bulb lights up, then switch it off.
- 5. Reinsert light wand into Star Sphere. Rotate light wand clockwise until it clicks into place. This is important for accurate date and time adjustments.
- 6. Place Star Sphere and light wand back into base.

Exploring The Night Sky

Take your time as you cruise the cosmos. Pick out a few of the brightest stars and study the stars near them. Use the constellations to guide you to the dimmer stars that can easily escape the casual observer.

For easier star-watching, you will need to give your eyes time to adjust to darkness. Astronomers call this becoming darkness adapted. You will see best after about 20 minutes in the dark. Care care should be taken not to look directly at any bright lights, so you don't ruin your night vision.

Learn More About Astronomy

If you want to learn more about the exciting subject of astronomy, check out your school's library, your local public library, a book store, or the Internet.

BATTERY SAFETY INFORMATION

- Non-rechargeable batteries are not to be recharged
- Rechargeable batteries are only to be charged under adult supervision
- Rechargeable batteries are to be removed from the toy before being charged
- · Different types of batteries or new and used batteries are not to be mixed
- · Batteries are to be inserted with the correct polarity
- Exhausted batteries are to be removed from the toy
- · The supply terminals are not to be short-circuited

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE — DO NOT DISCARD

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