A Short Guide to Photographing the Northern Lights

Capturing the Aurora Borealis is a thrilling experience. While it requires some patience and the right settings, it's easier than you might think. Follow these key steps to get a great shot.

Part 1: The Essential Gear

1. **A Camera with Manual Controls:** A DSLR or mirrorless camera is ideal. You need full control over shutter speed, aperture, and ISO.
2. **A Wide-Angle, Fast Lens:** The wider, the better (e.g., 14mm-24mm). Most importantly, it should be "fast" (a low f-stop number like f/2.8 or f/1.8) to let in as much light as possible.
3. **A Sturdy Tripod:** This is **non-negotiable**. You will be taking long exposures, and any camera movement will ruin your shot.
4. **A Remote Shutter Release or Use the Self-Timer:** This prevents camera shake when you press the shutter button. If you don't have a remote, use your camera's 2-second timer.

Part 2: The Perfect Camera Settings (Your Starting Point)

Start with these settings and adjust as needed:

- **Shooting Mode: Manual (M)**
- **Aperture (f-stop):** As wide as possible (e.g., **f/2.8**).
- **Shutter Speed:** Start between **5 to 15 seconds**.
    - *Too long* (20+ sec): The aurora will become a blurry green smear.
    - *Too short* (1-3 sec): The image will be too dark.
    - **Adjust this first!** If the aurora is moving fast, use a shorter shutter speed (5-8s). If it's faint and slow, use a longer one (10-15s).
- **ISO:** Start between **1600 and 3200**. Increase if the image is too dark, decrease if it's grainy.
- **Focus: Manual. This is the most common mistake!**
    - Autofocus will fail in the dark. Switch your lens to Manual Focus (MF).

    - Point your camera at a bright star or distant light. Turn the focus ring until the star is a tiny, sharp point of light. If you have it, use "Live View" zoomed in on a star to help.
- **White Balance:** Set to "Daylight" or "Cloudy" (around 4000-5500K). You can always adjust colours later if you shoot in RAW.

Part 3: In-the-Field Checklist

1. **Find Darkness:** Get away from city lights. Use a dark sky map to find a good location.
2. **Check the Forecast:** You need a clear sky and high auroral activity (KP index of 4+ is usually good but check your region).
3. **Dress Warmly:** You'll be standing still for a long time. Wear layers, gloves, and warm boots.
4. **Compose Your Shot:** The aurora is amazing, but a great photo needs a compelling foreground. Include a tree, a mountain, a lake reflection, or a person to create a sense of scale and place.
5. **Shoot in RAW:** This gives you much more flexibility to edit your photos later.
6. **Be Patient!** The aurora can be unpredictable. Wait for it, and be ready when the show begins.

Pro Tip: Take test shots early. Before the main event arrives, take a photo with your starting settings. Check your focus and composition. This way, when the sky explodes with light, you're ready to go.

Now get out there, stay warm, and good luck