

How the Solar Pathfinder Assistant Works

The Solar Pathfinder Assistant is your fast track to producing comprehensive reports on all of your solar panel installations.

Enabling the Assistant to make the calculations for you is easy. Just follow these steps and generate your report in seconds!

1. Arrange the Solar Pathfinder unit as you would at any installation site, setting it up at the prospective site level and pointing it to “magnetic south.”

2. Take a picture of the Solar Pathfinder with your digital camera and upload the image to the Solar Pathfinder Assistant.

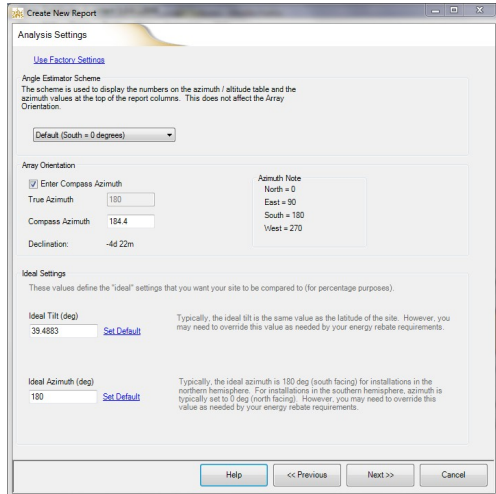


3. Choose type of report (PV, thermal, ecological). Type in the zip code (for USA, otherwise, use latitude/longitude) of the solar site.

Entering the zip code automatically inputs the following data:

- ❖ Latitude
- ❖ Magnetic declination
- ❖ Tilt angle* (assumes tilt = latitude)
- ❖ Closest global weather data station*
- ❖ Closest NREL data station*
- ❖ DC Rate (kWh)*
- ❖ Derate Factor*
- ❖ Azimuth (degree east/west of true south)*
- ❖ Cost of electricity* (cents/kWhr)
- ❖ Tilt mode*

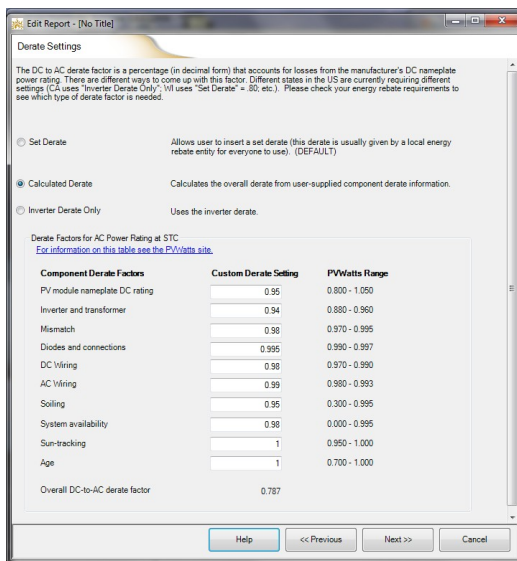
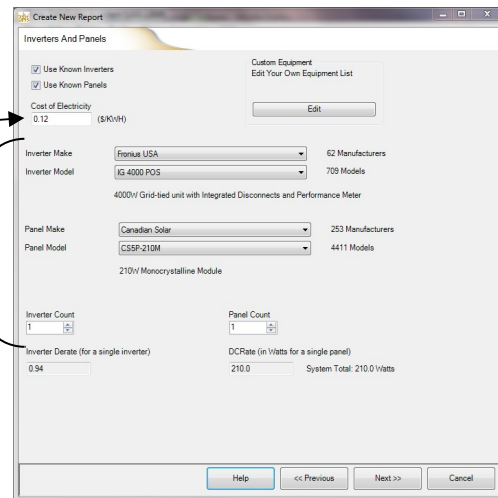
*denotes data you can override manually



4. Input azimuth

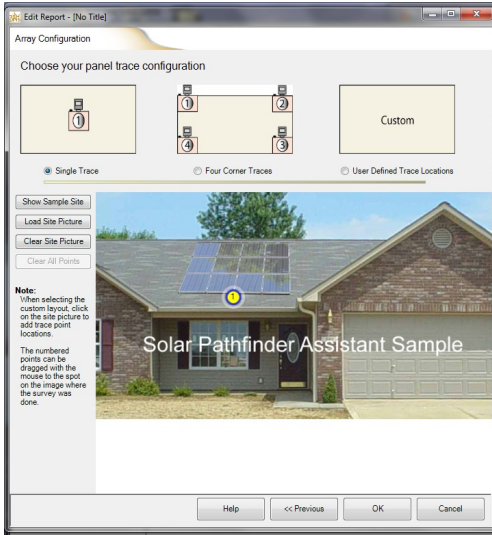
[Ideal settings at bottom of page are usually left as default. See software for more instructions.]

5. Input cost of electricity.
Select the panel and inverter make, model, and count you plan to install at the site.



6. Choose & Input Derate Settings

- Set Derate (used when regulatory authorities have a set derate that they want all to use, ex: “.85”)
- Calculate Derate (used to calculate derate from individual parts of system)
- Inverter Derate (uses derate of inverter only)

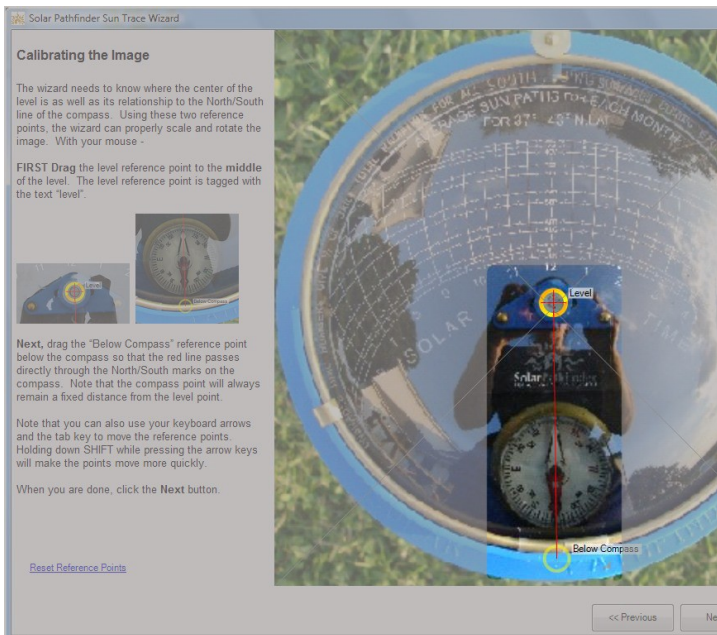
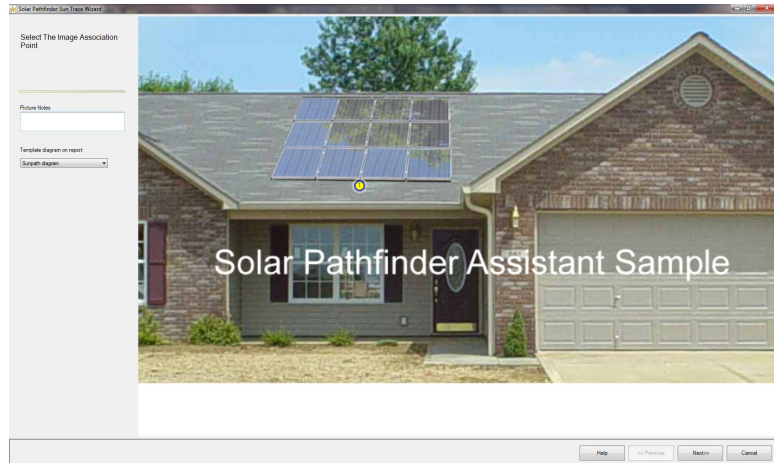


7. Insert picture of where panels will be located and show number of Pathfinder tracings and their location.

This documents your report and allows inspectors to know where tracings were taken.

8. Software will prompt you to input the first tracing picture (from your computer files) for your array.

9. Software will prompt you to mark which point on the “Array Configuration” page the picture is associated with.



10. Calibrate the site picture by simply cropping it and aligning the level and declination settings directly on the picture you have taken.

11. Next, you'll trace the shading around the site with a few clicks of the mouse.

12. Click "Create Report" to get your fully customizable solar site analysis.

The Assistant can create a report for a single analysis or the average of several analyses (4 corners of an array, etc.)!

Every report includes

- ❖ Ideal/Actual percentage of sunlight
- ❖ Ideal/Actual Solar Radiation (kWh/m²/day)
- ❖ Ideal/Actual kWhr
- ❖ Angle/azimuth values
- ❖ Cost Savings
- ❖ Side-by-side view/Single tracing view

